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RESULTS OF A THREE-YEAR TRACHOMA CAMPAIGN BEGUN IN KNOTT COUNTY, KY., IN 1913.

As Shown by a Survey Made in the Same Locality 10 Years Later.

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In 1912, at the request of the Kentucky State Board of Health and under instructions from the Surgeon General, the writer proceeded to Kentucky for the purpose of determining the prevalence of trachoma in that State. This survey was begun in Hindman, Knott County. A detailed survey was subsequently made in 23 counties. A total of 18,016 persons were examined, and 1,280, or between 7 and 8 per cent, were found to have trachoma. Of these, 16,696 were school children, and 1,324 were persons examined outside of the school.

The type of the disease found was very severe and its mutilating effects were much in evidence. Numbers of people had been blinded by this disease.

The original investigation made by the writer in the summer of 1912, in several mountainous counties of eastern Kentucky, showed that out of a total of 4,000 examined, 500, or 12½ per cent, were suffering from trachoma. Many of these were school children. At that time, cases of trachoma were seen in the rural districts and in villages, and the disease was so prevalent and so common and had been in existence for such a long time that the people seemed to look upon it as a matter of course. As one old resident expressed it, "You couldn't throw a stone in any direction without hitting sore eyes."

In 1913, in cooperation with the Kentucky State Board of Health, the Public Health Service established a hospital in Hindman, the county seat of Knott County. An eye specialist was in charge, assisted by two trained nurses and other necessary assistants, and the problem of eradicating trachoma was undertaken. The patients were received into the hospital and given free care and treatment. The treatment was surgical, the selective grattage method being used. This hospital was established in September, 1913, and as there appeared to be no further need for the hospital in this county, it was transferred to Pikeville, Ky., September, 1916. In three years, therefore, this scourge had been practically eradicated from probably the worst infected county in the United States.

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In making observations in Hindman and other places in the county, in much the same manner as had been done 10 years previously, the changes noted in conditions were most remarkable. In place of the many sore-eyed people and the almost universal practice of wearing colored glasses observed 10 years previously, there was seen scarcely a single colored glass worn, and not one case of active trachoma was seen casually. From the standpoint of public health, humanity, and economic considerations, there is no way of estimating what this relief has been worth, not only to the county or the State, but to the entire United States. It was learned that many of the former trachoma cases had gone to other States, some of them having gone as far as Wisconsin, and it was very gratifying to learn that before they left Knott County their trachoma had been entirely cured, thus preventing the spread of the disease into other States. The amount of irritation and constant pain that has been relieved is impossible even to estimate. At the beginning of this work, numbers of blind people, the result of trachoma, were paupers on the county. Some of these are still public charges; but it is very gratifying to note that the number has not increased. It is believed that but for the treatment received through the hospital established there in 1913, there would have been many more in this same condition. It must also be remembered that a great many of these patients were children of school age who were unable to attend school because of the constant irritation and the resultant impairment of vision caused by trachoma.

In making the original investigation, the great majority of the places were visited on horseback, which required time, on account of bad roads or, in some cases, the absence of roads. In the report that was made of this investigation in 1912 it was stated:

"Many were blind from trachoma and had to be led around after suffering from "sore eyes" (trachoma) all their lives. Corneal complications were very common, varying from the slight ground-glass appearance to pannus and ulceration. There were patients who remained in dark rooms shielding their eyes with their arms, dark clothes, glasses, etc., who had probably not seen light for many weeks or months, and these were unfortunately not isolated cases by any means. Many of the cases had existed for a period of many years, and not a few for 40 years or even longer. They all gave the same history of exacerbations and remissions. Many cases simulate very closely the old Egyptian ophthalmia. In Hindman, on the first day of court, when a large number of people were in town from all sections of the county, I examined about 250 people, practically all men, representing many families, and found that 18 per cent were suffering from trachoma. In some schools visited when the neighbors were present, trachoma was found in all its stages, and I saw cases with all sequelæ. There was the acute beginning in the small child, and all the way through the various ages and stages to those old cases which had handicapped their

victims for a lifetime and had ended in the terminal cicatricial stage and absolute blindness. There were seen many pathetic cases among these blind people who lived in the mountains far from medical centers. One has only to visit this disease as it exists in these mountains—the genuine trachoma—and see what a fearful handicap it imposes upon its victims to really appreciate the wisdom of barring immigrants suffering from it. There is no lack of evidence here that it is both infectious and dangerous to sight. The disease not only lasts throughout the lifetime of the individual, but constantly claims other victims and gains strength as it goes along—certainly a fearful handicap with which to struggle through life only to pass their final days in darkness, a burden to themselves, their families, and friends. By patience and unflagging perseverance this scourge can be removed and these mountain people given the opportunity which has heretofore been denied them by reason of this ever-present handicap—trachoma."

In order to determine the results of the campaign for the eradication and prevention of the further spread of trachoma in Knott County, the writer returned there in July and August, 1923, with the idea of seeing personally as many of the cases as possible.

The records show that 740 trachoma patients, residents of Knott County at the time of the treatment, were treated at the U. S. Public Health Service Trachoma Hospital during the years 1913 to 1922, inclusive. Previous arrangements had been made with the county health officer who held that position at the time the first survey was made in 1912, and who was still county health officer at the time of this report. During the time that the hospital was conducted in Hindman, this officer became very much interested in the care and treatment of trachoma. He has always lived in this county and is personally acquainted with probably every person in the county. He is a very active county health officer; and, being particularly interested in trachoma, he everts the eyelids of the school children on his routine visits to the schools and has very definite knowledge of the condition of the great majority of cases that were treated and are included in the 740 patients.

In making the recent visit to Hindman and other localities in Knott County, it was my intention personally to see every case, or as many cases as possible, of the previous cases in order to determine the results from treatment. The county health officer assured me that this would be practically an impossibility, as many of our former patients had died of some intercurrent disease, numbers had moved to other States, and many of the young men were then serving in the Army. However, an effort was made by means of inviting the people to assemble at the churches, etc., in the rural districts, and in other ways, to see the old patients, and the results were extremely gratifying. In one instance, at a place called Carr's Fork, a tuberculosis clinic had also been advertised, and probably 700 people were assembled. On that day I examined 235 school

children and 300 adults, and found only 5 cases of active trachoma, one of which had never applied for treatment. I saw 25 cured cases of the 740 cases, and they all appeared to be completely cured. This was about 3 per cent of the number examined.

Taking into consideration those cases that I saw personally, and going over the list carefully with the county health officer, out of the 740 there were only 12 cases that were known to be suffering at the time from active trachoma. Four hundred and sixty-nine, or 63 per cent, were known to be completely cured of trachoma, and the results in 259, or 35 per cent, were in doubt. The county health officer placed in the doubtful column all cases concerning which he was not sure, from a personal examination, that a cure had been effected. It is, therefore, not positively known how many of the 259 were still suffering from trachoma; but if the same ratio of cures should prevail, there would still be about 7 active cases, or only 20 trachoma cases still remaining uncured out of the 740. These children were returned to school, and a number of the boys are now serving in the Army. Heads of families who for years had been unable to earn a livelihood and mothers unable to care for their children have been restored to usefulness and society.

In summary, therefore, it can be stated that one of the worst infected trachoma regions in the country has been practically cleared of the disease within a period of less than 10 years. The prophecy made in the report of the original survey that "by patience and unflagging perseverance this scourge can be removed and these mountain people given the opportunity which has heretofore been denied them by reason of this ever-present handicap—trachoma," has been substantially fulfilled, in this instance at least.

THE SPLEEN RATE OF SCHOOL BOYS IN THE MISSISSIPPI DELTA.1

By K. F. Maxey, Assistant Surgeon, and C. P. Coogle, Acting Assistant Surgeon, United States Public Health Service

The use of a "spleen index" as an indicator of the amount of malaria in a given area has been discussed in previous reports (1, 2). The question raised is whether this index, which has been found so satisfactory by tropical workers, could be used under American conditions, where the disease is apparently less general in its distribution and usually less severe in its intensity. The observations so far recorded (3, 4, 5, 6) have indicated that, while the spleen rate of school boys is quite low in certain sections of this country known to be malarious, there are, nevertheless, others in which the rate is

¹ From Field Investigation of Malaria, United States Public Health Service. Field work done by Doctor Coogle; notes compiled by Doctor Maxey.

sufficiently high to yield a figure of significant value for comparative purposes.

The Mississippi Delta has always been a section of interest to the American antimalaria worker. The topography is particularly favorable to heavy production of Anopheles quadrimaculatus. The flat "river-bottom" land is everywhere traversed by sluggish streams, with dendritic bayou connections forming innumerable cypress and sweet-gum swamps. Between the bayous are located great cotton plantations worked by thousands upon thousands of negro families living under conditions of maximum exposure to mosquito bites and more or less negligent in treating their "chills." Here, then, where malaria is a common occurrence and the parasite flourishes throughout the year, it was to be expected that the infection rate would be reflected in the number of school boys having enlarged, palpable spleens.

METHOD.

As in the previous examinations, palpation for enlarged spleen was made with the subject in the standing position. The examiner slipped his hand under the loosened clothing next to the skin; then the subject was instructed to lean forward slightly, relax the abdominal muscles, and breathe deeply. In case of doubt the subject was placed in the reclining position with legs flexed to confirm the observation made in standing position. Only those spleens were recorded as positive which were definitely palpable beyond all question of doubt.

At the time of the examination each boy was questioned concerning malaria during the preceding year. If, in the judgment of the examiner, his story was characteristic of this disease, his history was marked positive. Blood smears were taken at random from the same group—a thick and a thin smear on the same slide. The slides were examined in the Memphis laboratory under the direction of Acting Asst. Surg. William Krauss.² The results are based upon the examination of the thick smears.

With regard to limiting the observations to boys, it is pertinent to call attention to the impossibility of measuring the total amount of malaria in a given population. Reliance must be placed upon some sort of *index* derived from a population *group*. For reasons of practical availability under field conditions, it was agreed to limit spleen observations to boys of school age.

The field work was conducted during the winter—January to April. This is the season in which malaria reaches its lowest ebb. A negligible number of "new" infections are occurring; practically all of the occurrence is the "chronic" malaria residual from the past season. Measurement of the incidence of the disease at this

²The authors wish to express their appreciation to Doctor Krauss and Miss Ethel Barrier for their valuable assistance in this study.

time of year possesses the advantage of a minimum fluctuation due to annual causes and avoids the wide chance variations affecting an index taken before, during, or just after a local outbreak of new infections.

The figures obtained in this investigation, therefore, are comparable only with figures derived from spleen examinations done with the same technique on the same population group at the same time of year.

RESULTS.

Thirty-five schools distributed in the four Mississippi counties—Leflore, Tallahatchie, Sunflower, and Coahoma—were selected for investigation. Enid consolidated, Agriculture High, and Cascilla consolidated are in the "hill" section of Tallahatchie County; the others, 32 in all, are located in the flat "Delta" lands. Twenty-one were white schools and 14 were colored. The findings should be fairly representative of this section. In Table I are shown the detailed results by schools.

Table I .- Summary of results of examinations of boys for malaria, by schools.

		1	History			Spleen			Blood.			
County and school.	Race.	Num- ber exam- ined.	Num- ber posi- tive.	Per cent posi- tive.	Num- ber exam- ined.	Num- ber posi- tive.	Per cent posi- tive.	Num- ber exam- ined.	Num- ber posi- tive	Per cent posi- tive.	Dat 1923	
Leftore:												
1. Salem	C	9	3	33	9	0	0	8	0	0	Apr.	15
2. Boyd Bayou	C	14	6	43	14	0	0	14	2	14	Apr.	
3. Browning	C	20	11	55	20	5	25	19	1	5	Mar.	
4. Star West	C	24	6	25	24	5	21	17	0	0	Apr.	16
5. St. Paul	C	22	12	55	22	3	14	22	4	18	Apr.	20
6. Money	C	28	11	39	28	3	11	28	2	7	Apr.	20
7. Race Track	W	14	8	57	14	0	0	8	0	0	Apr.	30
8. Minter City	W	65	35	54	65	1	2	25	0	0	Mar.	2
9. Morgan City	W	48	33	69	48	8	17	16	2	12	Apr.	2
10. Swiftown	W	31	10	32	31	3	10	29	1	3	Apr.	17
Tallahatchie:												
1. Glendora	W	7	2	29	7	0	0	4	0	0	Jan.	2
2. Tutwiler High	W	25	12	48	25	0	0	24	0	0	Jan.	30
3. Vance	W	29	22	76	29	2	7	29	3	10	Feb.	21
 Separate district 	W	15	6	40	14	0	0	6	0	0	Feb.	
Webbs consolidated.	W	17	7	41	17	0	0	13	0	0	Feb.	
Cascilla consolidated.	W	68	37	54	68	9	13	23	1	4	Mar.	
7. Agriculture High	W	37	26	70	37	7	19	16	0	0	Mar.	
8. Enid consolidated	W	24	16	67	24	4	17	12	0	0	Mar.	9
9. Deep Bayou	W	5	3	60	5	0	0	5	1	20	Mar.	
10. Sumner	W	76	13	17	76	7	9	24	0	0	Mar.	
11. Mount Levee	W	15	7	47	15	3	20	13	2	15	Mar.	
12. Blue Lake	W	10	7	70	10	2	20	10	0	0	Feb.	
13. Dyress Chapel	C	23	18	78	18	0	0	17	2	12	Feb.	
14. Beulah	C	34	24	71	34	6	18	33	1	3	Feb.	
15. Sumner High	C	35	22	63	31	7	21	35	7	20	Feb.	
16. Anderson	C	30	24	80	30	4	13	24	1	4	Feb.	
17. St. James 18. St. Luke	C	24	14	58	24	3	13	11	1	9	Feb.	
Sunflower:	C	24	13	54	24	3	13	17	2	12	Feb.	23
1. Rome	w	76		O.O.	· Par							-
2. Rome	C	41	20	26 32	76	4	.5	8	0	0	Jan.	29
Coahoma:		41	13	02	41	6	15	24	.0	0	Jan.	29
1. Mathson	C	43	20	47	43	5	10	90		19	Ton.	90
2. Friars Point.	č	55	12	22	55	6	12 11	32	4 0	13	Jan. Feb.	30
3. Lula-Rich	w	56	23	41	56	0	0	20		5		
4. Jonestown	w	40	8	20	40	2	5	11	1 2	18	Feb.	1
a. somestown		40	0	20	40	- 2	9	11	2	18	reb.	
Total		1,084	504	46. 49	1,077	108	10.03	631	40	6.34		

The uneven distribution of the disease in different school districts is shown by the wide variation in the "history rate," which ranges from 17 per cent up to 80 per cent. The average rate for the whole group of 1,084 boys examined is 46 per cent, or practically one out of every two gave a history of "chills and fever" during the preceding season.

In some of the schools no palpable spleens were found. In others, 20 to 25 per cent of those present had definite enlargement. In all, 108 boys were found positive for spleens—a rate of 10 per cent. The same irregularity is noted in blood findings, the average percentage, however, 6.3 per cent, being considerably lower than that for the spleens.

When comparison is made of the results in the two races, as in Table II, interesting differences are brought out. Although the history rate is practically the same, both spleen rate and parasite rate indicate that the colored race is almost twice as heavily infected as the whites in this area during the winter season. The spleen rate is 13.3 per cent for the colored as compared with 7.9 for the white, and the parasite rate 8.1 per cent for the colored as compared with 4.4 for the white.

Table 11.—History and spleen and parasite index of schoolboys, according to race, in Leftore, Tallahatchie, Coahoma, and Sunftower Counties, Miss., January to April, 1923.

		History.			Spleen.		1	Parasites	
Race.	Num-	Num-	Per	Num-	Num-	Per	Num-	Num-	Per
	ber	ber	cent	ber	ber	cent	ber	ber	cent
	exam-	posi-	posi-	exam-	posi-	posi-	exam-	posi-	posi-
	ined.	tive.	tive.	ined.	tive.	tive.	ined.	tive.	tive.
WhiteColored	658	295	44.83	657	52	7. 91	296	13	4.39
	426	209	49.06	420	56	13. 33	335	27	8.06
Total	1,084	504	46. 49	1,077	108	10.03	631	40	6.3

DISCUSSION.

The ease, rapidity, and relative inexpensiveness of the spleen index strongly recommend this method of measuring the amount of malaria when and where it can be used. Field workers in this country have been somewhat reluctant to adopt the method, first, because the rate was thought to be too low to be useful, and, second, because there was a feeling of uncertainty as to its dependability.

It may be accepted as an established fact that in the "malaria belt" of this country a spleen rate of more than 1 per cent is indicative of the presence of this disease, and as the rate increases above 3 or 4 per cent, based on any considerable number of examinations, it becomes significant in value for comparative purposes. It has been shown that in many localities in this country the spleen rate

does have a significant value. The value which it attains depends

of course upon the selection of groups for examination.

When the school district is the unit of observation, it is evident that while there may be a neighborhood in the district which is severely infected with malaria, the remainder of the district, from which perhaps a majority of the children come, may be relatively free from malaria. Owing to the focal character of the distribution of this disease, the number of "positives" from the malarious neighborhood will be "diluted" in this case by the large numbers coming from the noninfected neighborhoods. This is particularly true of consolidated schools, which may draw from a district 10 miles square. On the other hand, when the unit of observation is a single plantation, or an infected locality, the spleen rates might be much higher (less dilution by noninfected persons), owing to selection of the epidemological group. The school district has been used as the unit of these studies because of its availability for comparison in all areas and because everyone easily understands what the unit represents. There are, of course, large areas in the South where the "plantation system" of farming no longer exists, and it is often very hard definitely to delimit an "infected locality." Accordingly, it follows that the spleen rate of schoolboys may be looked upon as the minimum rate for that section of country.

Concerning the dependability of a spleen index as compared with a parasite index, from a statistical point of view, there is much evidence to indicate that it is equally valuable. Both indices demand a sufficient amount of skill on the part of the examiner, but the technique of one is not more difficult to acquire than that of the other. Both demand that the same sort of technique be used in repeated or independent surveys if the results are to be comparable. Finally, both require that a sufficient number be examined to reduce

chance variation to a very small figure.

It would seem advisable, if the method is to be used generally, that only those spleens should be counted as positive which can be palpated beyond all question of doubt and easily demonstrated to any person, present. Using a criterion of this sort it has been demonstrated (7) that it is possible for independent observers, working with the same population group in successive seasons, to

obtain closely similar results.

That there may be a close parallelism between spleen rate and parasite rate taken during the winter months is indicated by the following observations: Veldee (7) called attention to the fact that the ratio of palpable spleens to positive blood smears in the area in which he was working was 1.08 to 1.00, based on the work of Maxcy and Coogle, and 1.09 to 1.00 on the basis of his own observations. In the Mississippi series here reported, it is pertinent to remark that

the spleen rate differs in the two races, white and colored, in almost the same ratio as does the parasite rate. Thus, the spleen rate for the white schoolboys was 7.92, for the colored 13.93—a ratio of 1.00 to 1.68. The parasite rate for the whites was 4.39, for the colored 8.06—a ratio of 1.00 to 1.84. Thus, whether the spleen rate or the parasite rate is used, the same proportionate prevalence is indicated among the colored, within the limits of the sampling error.

As has been pointed out, particularly by Darling (2), in addition to the use of the spleen rate for comparative or statistical purposes, the examinations reveal a large number of cases of chronic malaria which would not have been discovered were reliance placed only on the examination of a single thick blood smear. Thus, in the Mississippi series here reported, only 40 of the 631 blood smears examined were found positive; and of these 40 positives, 12 were also detected by palpation for an enlarged spleen. On the other hand, of the 108 boys found to have palpable spleens, a thick smear from 101 gave only 12 positives. Accordingly, if dependence had been placed upon the examination of blood smears alone, only 40 of the total of 136 boys who were chronically infected (as evidenced by either a positive blood smear or an enlarged spleen) would have been discovered; whereas by palpation for enlarged spleens, 108, or 80 per cent of all, would have been revealed. This confirms similar experience in southeast Missouri.

The value of the method in demonstrating "carriers" or chronically infected schoolboys, many of whom will doubtless furnish the parasites for the new generation of Anopheles next season, is evident. The "spotting" of these chronic cases and referring them to their proper neighborhood within the school district gives the lead to the localities which should be more intensively studied with a view to control.

CONCLUSION.

1. The number of boys with a definitely palpable spleen in the Mississippi Delta region is sufficiently large to yield, in many areas, a spleen index of significant value as a measure of malaria prevalence.

2. The spleen rate among colored boys is significantly higher than that among whites in this area.

3. Evidence is presented indicating that the spleen index is as valuable as a parasite index in the section studied.

BIBLIOGRAPHY.

- Extracts from references in available literature pertaining to spleen examinations in malaria. Pub. Health Rep., vol. 36, No. 16, April 22, 1923, pp. 884-888. (Reprint No. 653.)
- (2) Darling, S. T.: Ascertaining the spleenic index and the mosquito focus from school children. Jour. Am. Med. Assoc., vol. 80, No. 11, March 17, 1923, pp. 740-742.

(3) Derivaux, R. C., Taylor, H. A., and Haas, T. D.: Malaria control. Pub. Health Bulletin No. 88, 1917, p. 38.

(4) Barber, M. A., and Coogle, C. P.: Spleen examinations of schoolboys in Mitchell County, Ga. Pub. Health Rep., vol. 36, No. 14, April 8, 1921, pp. 706-710. (Reprint No. 653.)

(5) Barber, M. A., and Coogle, C. P.: Unpublished report.

(6) Maxcy, K. F., and Coogle, C. P.: The spleen rate of schoolboys. South. Med. Jour., vol. xvi, No. 4, April, 1923, pp. 269-281.

(7) Veldee, M. V.: Spleen and blood examinations for malaria. Pub. Health Rep., vol. 38, No. 28, July 13, 1923, pp. 1574-1580. (Reprint 852.)

MILK TO BE SERVED IN INDIVIDUAL CONTAINERS IN CHICAGO.

The Health Department of Chicago, in its Weekly Bulletin dated September 15, 1923, calls the attention of persons who eat in restaurants, cafés, and other eating places to the manner in which milk should be dispensed in order to secure the best guaranty of a safe milk and one of the utmost food value. For several years the Chicago Department of Health has been collecting samples of milk as served in glasses to patrons of eating places. In a survey made during May, June, and July, 1923, 914 milk samples were examined, and of this number, 451, or approximately 50 per cent, were found to be below grade, consequently below the required food value.

According to a section of one of the city ordinances no person, firm, or corporation is allowed to keep, sell, or offer for sale any milk which contains more than 88 per cent of watery fluids, less than 12 per cent of total solids, or less than 3 per cent of butterfat. Violators of the provisions of this section of the ordinance are subject to a fine of not less than \$5 nor more than \$200 for each offense. Another section provides that "Pasteurized milk and skim milk shall not contain more than 50,000 bacteria per cubic centimeter from October 1 to May 1, inclusive, and not more than 100,000 bacteria per cubic centimeter from May 2 to September 30, inclusive." After a thorough investigation in the city and a study of the practice obtaining in 12 of the largest cities of the United States, as set forth in replies to questionnaires sent out to the health departments of these cities, the Chicago Department of Health issued the following orders requiring that milk be served in individual containers:

To Milk Dealers:

On and after November 15, 1923, it will be required that milk sold to the public by coffeehouses, restaurants, lunch rooms, and elsewhere be served to the patrons in the original containers, bottles, or receptacles of a similar character, instead of by the glass, as heretofore.

You are requested to cooperate with this department and make the necessary plans to make this requirement effective on that data.

To Restaurants, Cafés, and All Other Eating Places:

On and after November 15, 1923, it will be required that milk, already Pasteurized, bottled, and capped by the milk distributer, shall be served to your patrons from the original individual bottles, or receptacles of a similar character.

It has been found necessary to enforce this order for the reason that one-third of the samples of milk collected by this department from restaurants, lunch-rooms, cafeterias, and other eating places have consistently run below the standard butterfat content of 3 per cent, which is in violation of the Chicago ordinance.

You are requested to cooperate with this department and meet these requirements on the date mentioned.

The following is the questionnaire sent out by the health department July 11, 1923, and below are the answers received from the health authorities of the 12 large cities:

QUESTIONNAIRE.

"I am writing to ask how your city handles the situation with reference to liquid milk sold to patrons of restaurants, ice-cream parlors, lunch rooms, coffeehouses, and other eating places where milk is served by the glass.

"Probably an ordinance requiring the sale of liquid milk in bottles would solve the problem. On the other hand, objection is made to this by the explanation that in small places, owing to lack of space, the establishment would not have room enough to pile the cases in which the individual bottles would be placed.

"I would like to know whether you have an ordinance requiring that bottled milk be sold exclusively, or is it covered by regulation? Have you instituted suit against violators, and has this remedied the matter, and to what extent?"

ANSWERS.

Sacramerto.—"Sacramento Health Department was pioneer in regulating the consumption of milk in original containers and trusts other cities, large and small, may be benefited by its work. Arguments were presented that if passed (ordinance to regulate consumption of milk in original containers) it would reduce the consumption of milk in restaurants, etc., and increase the price, and in many places milk could not be handled. We have found that the consumption has increased from 12 to 23 per cent. Milk is sold in original bottles of one-half pint and retails from 5 to 10 cents per bottle, and the objectors now maintain that it is more efficiently controlled and with less trouble to them."

Los Angeles.—"Beginning August 21, 1923, the State law provides that all milk served at restaurants, etc., must be in the original bottle and opened in the presence of consumer, thereby eliminating any chance for cheating. The object of space can be easily overcome, as everyone serving milk or any other food should make proper provision to meet the existence of law and sanitation."

Boston.—"Milk is sold in some of our first-class restaurants by the bottle; that is, a bottle small enough to give the customer about one glass of milk. The restaurant keepers do not have the right to sell milk in any form to take out; that is, the customer must consume the milk within the restaurant."

Detroit.—"In hotels and restaurants in Detroit milk is allowed to be dipped. We appreciate that there is a problem connected with this method of distributing the product. The bottling of milk, if you really take the consumer into consideration, is the only means

we have of assuring them of a wholesome product."

Baltimore.—"All liquid milk sold to patrons of restaurants, ice-cream parlors, coffeehouses, and other places where milk is served by the glass must be served in the original container in which the milk was placed after pasteurization and kept there. We permit the restaurateur to loosen the cap before handing the bottle to the patron, but we insist that the loosening or removal of the cap take place in the presence of the patron so that the latter knows for himself that the package has not been opened prior to his purchase. We fully recognize the fact that the patron served from the first pourings receives the preponderance of cream at the expense of all subsequent patrons who are served from the same bottle. This is a matter which we know must be remedied and we are drawing a new ordinance to this effect. We are emphatically opposed to the use of bulk milk in cans or so-called urns and strictly prohibit such sale in the city."

City of New York.—"We have no regulations which prohibit the sale of dipped milk in the city. As a matter of fact, about 50 per cent of the milk sold in this city is dipped. While we would like very much to have nothing but bottled milk sold in the city, we have not been able to see our way clear to make such regulations. The principal objection that we have to meet is an economic one. If we were to require that only bottled milk be sold in the city, there is no doubt that many of the people who are now using milk would be deprived of it, or else the amount consumed by them would be materially curtailed." (This objection is well answered in the letter from Sacramento.)

St. Louis.—"The milk ordinance provides for the bottling of all milk sold to the consumer." (Furnishes no information as to the

regulation of milk sold to patrons of eating houses.)

Buffalo.—"We have no law or ordinance prohibiting serving of milk in restaurants and other places from cans or serving devices, although we have for a number of years been endeavoring to convince these institutions that public safety calls for dispensing the product in individual bottles to the consumer. Dipping milk from cans and serving from tanks, etc., results in lack of uniformity of butterfat content and with this as a weapon we have been able to coerce a considerable number into serving in bottles, having taken measures to prosecute for selling adulterated milk in those cases where indicated."

Milwaukee.—"About 60 per cent of all milk sold by the glass is handled by the large restaurants and is sold in half-pint bottles. The statement of the managers of these establishments is to the effect that they would not go back to the can process. There is no real excuse for the restaurant man to stand in the way of an ordinance which insists that milk be dispensed in half-pint bottles. As a business venture, restaurant men admit that their patrons have, to a large extent, forced the situation by insisting that milk be brought to them in the capped bottle, which is only then opened at the time of consumption. Any ice box that will accommodate a can of milk will as readily accommodate an equivalent number of half-pint bottles of milk. You are entirely justified and surely will be backed by public opinion on insisting that milk be retailed in half-pint capped bottles."

Philadelphia.—"In reference to the handling of liquid milk sold to patrons of restaurants, ice-cream parlors, lunch rooms, and other eating places where milk is served by the glass, I wish to advise the greatest bulk of milk served in such places is by bottles or by milk pump. All such places are required to furnish a milk license, and in order to gain the same the department of public health requires that the milk be served to the patrons free from contamination and in a clean and wholesome state. Dipped milk is forbidden except in places where dairy products are supplied, and then under certain restrictions. The number of these places are so few as to make them

negligible."

San Francisco.—"Last March the legislature amended the State law which now requires every place selling milk for human consumption, in any restaurant, hotel, eating place, or place of entertainment, must serve the same in a bottle and the cap must not be removed except in the presence of the consumer. The objection is not valid that in small places, due to lack of space, the establishment would not have room enough for the milk bottles that accumulate. Further, we do not allow restaurants, hotels, cafés, or any other places that serve food to bottle milk upon the premises. This must be done by the dairyman, and the empties must be sterilized in accordance with the provisions of our ordinance."

Cleveland.—The reply from Cleveland refers to its sanitary code, which reads as follows: "No person, firm, or corporation shall sell, keep for sale, deliver, or suffer or permit to be sold, kept for sale, or delivered any milk, buttermilk, whey, sour milk, skimmed milk, cream, or cottage cheese in quantities less than 1 gallon, except in

clean bottles and containers sealed with a tightly fitting cap, stopper. or cover, except where the milk is sold at the milk house or dairy, when the same may be dipped; but such dipped milk shall not be carried on the street in any other than a covered vessel: Provided, however, That cream or milk served as a flavoring or coloring for food or drink may be served in containers, when taken from packages as provided in this section: Provided further, That all bottles containing milk, buttermilk, or cream intended for sale in the city shall be capped by a mechanical device, and it shall be unlawful to insert any cap or stopper in any bottle containing any such milk or cream by hand."

It is stated that, while the health department will take the necessary steps to enforce the orders requiring milk to be dispensed in individual bottles, great aid in the enforcement can be given by the consumer in demanding that he be served milk in individual con-

tainers and that the caps be removed in his presence.

In summarizing the question of methods of dispensing milk in restaurants, cafés, etc., the commissioner of health states that-

(1) If the consumer demands milk served in individual containers

he will receive it.

(2) To possess its greatest food value, milk must have all of its ingredients in the right proportion.

(3) Servings of milk from bulk containers have unequal food value.

unless the container is sufficiently agitated.

(4) The danger of contamination by unclean handlers can be avoided by dispensing milk in individual bottles properly filled and capped.

(5) Serving milk in individual containers is the best guaranty of

purity and proper content.

MEDICAL AND DENTAL SOCIETIES INDORSE WORK OF LOCAL HEALTH UNIT.

The following letters from the San Joaquin County Medical Society and the Central California District Dental Society were received by the San Joaquin County (Calif.) Health Unit, in whose work the United States Public Health Service is cooperating.

These letters afford an excellent example of the close cooperation and relationship which should exist between properly organized and conducted public-health departments and the medical and dental professions.

From: Board of directors San Joaquin County Medical Society. To: Board of directors of the San Joaquin County Health Unit. Subject: Board of health and its organization.

GENTLEMEN: During the past few months we have carefully watched your organization, and as said body pertains to the health and protection of the county, we as directors of San Joaquin County Medical Society are vitally interested in said organization. We have watched carefully the workings and the organization and the plan, and we wish to commend you and your organization and Doctor Sippy upon the efficiency with which your plan is working.

We have taken careful note of the decrease in contagious diseases throughout the county and particularly noticed the decrease in the death rate in surrounding country. These two factors are to be

especially commended.

We are particularly anxious that you should continue on in your splendid work, * * * and we wish to commend you and the personnel of your body, and if any time we can be of any assistance to you we will do our utmost to render you service.

[Signed by Members of the Board of Directors.]

Dr. J. J. SIPPY.

Director San Joaquin County Health Unit, Stockton, Calif.

DEAR DOCTOR: The Central California District Dental Society. realizing the imperative necessity of a sustained educational campaign along dental lines, and through daily contact with the mouths of the community being in a position to appreciate the work being done by your dental department, have passed the following resolutions and ordered a copy sent to your office:

Whereas the San Joaquin District Health Unit has proven the need of such a unit and established the fact that the health of the community can be taken care of to better advantage, as well as more economically, under the unit system; and

Whereas the said health unit has a department of dentistry which is proving very

popular with the general public; and

Whereas as dentists we daily come in contact with people suffering from disease and pain due to ignorance and neglect and being fully convinced that, as the mouth is the gateway to the body, * * * it is vitally essential that people should be taught the value of a clean, healthy mouth: Therefore be it

Resolved, That the members of the Central California District Dental Society do hereby give the indorsement of and promise their cooperation to the San Joaquin County Health Unit in its work, particularly in the field of dentistry.

[Signed by Members of the Committee on Resolutions.]

COURT DECISION ON EXECUTION OF VENEREAL-DISEASE ISOLATION ORDER.

The Supreme Court of Kansas has decided 1 that an order isolating a woman affected with venereal disease at the State quarantine hospital for women, issued by the city physician of Wichita, should be executed by the sheriff of the county and the expense of executing the order paid for by the board of county commissioners.

DEATH RATES IN A GROUP OF INSURED PERSONS.

COMPARISON OF DEATH RATES FOR PRINCIPAL CAUSES OF DEATH, JULY AND AUGUST. 1923, AND AUGUST AND YEAR, 1922.

The accompanying table is taken from the Statistical Bulletin of the Metropolitan Life Insurance Co. for September, 1923, and presents

¹ Nyberg, City Physician, v. Board of Com'rs of Sedgwick County et. al., 216 Pac. 282.

the mortality experience of the industrial insurance department of the company for July and August, 1923, and August and year, 1922. The rates for 1923 are based on a strength of over 14,000,000 insured

persons.

The gross death rate for this group for August (7.7 per 1,000) is stated to be the lowest mortality rate so far during 1923 and the lowest rate for the month of August ever recorded among the industrial policyholders of the company, with the single exception of that for August, 1919 (7.6 per 1,000). The death rate for this group has shown an uninterrupted decline from the March rate of 12.2, the highest for the year. The 1921 and 1922 death rates, both of which had their peak in March, increased in August over July. The 1921 death rate reached its lowest point, 7.9 per 1,000, in both July and October, and the 1922 rate reached its low of 7.4 in September.

It is stated that the favorable showing for August, 1923, is due largely to lower mortality from tuberculosis, heart diseases, cerebral hemorrhage, Bright's disease, and pneumonia. A slight seasonal increase for typhoid fever is shown, the death rate for that disease increasing from 6.7 per 100,000 in July to 8.2 in August—which was the same as the record low August rate registered in 1920. It is noted that the cumulative mortality from typhoid fever for this group up to and including the month of August is below that for last year, which marked the minimum in the records of the company for that part of the year. Thus, a new low annual death rate for typhoid among the industrial policyholders of the company is predicted for this year.

Death rates (annual basis) for principal causes per 100,000 lives exposed, July and August, 1923, and August and year 1922.

	Death ra	te per 100	,000 lives e	xposed.
Cause of death.	August, 1923.	July, 1923.	August, 1922.	Year 1922.
Total, all causes	770.3	795.8	815.5	882.9
Typhoid fever	8.2	6.7	8.9	5.7
Measles	4.1	7.1	3.0	4.3
Searlet fever	1.4	2.1	2.0	4.9
Whooping cough	4.8	4.8	3.1	2.6
Diphtheria.	9.0	7.9	9.1	18.0
Influenza		4.5	3.8	21.7
Tuberculosis (all forms)	105.2	107.8	114.9	114.2
. Tuberculosis of respiratory system		96.6	104.8	103.6
Cancer	68.1	69.0	74.3	72.0
Diabetes mellitus	12.3	11.6	(1)	17.2
Cerebral hemorrhage	47.5	51.0	56.2	62.9
Organic diseases of heart.	104.8	113.0	111.6	126.7
Pneumonia (all forms)		33, 3	26, 7	73.7
Other respiratory diseases		9.8	10.4	13.7
Diarrhea and enteritis		17.6	17.2	10.8
Bright's disease (chronic nephritis)	58.3	59.7	64.5	70.3
Puerperal state	13.2	17.6	16.4	19.0
Suicides	5.8	7.1	8.0	7.5
Homicides	7.5	6.9	6.4	6.3
Other external causes (excluding suicides and homicides)	73.8	76.9	67.2	58, 1
Traumatism by automobile	18.4	15.1	15.4	13.6
All other causes	182.3	181.4	211.9	173.3

¹ Not available.

DEATHS DURING WEEK ENDED OCTOBER 13, 1923.

Summary of information received by telegraph from industrial insurance companies for week ended October 13, 1923, and corresponding week of 1922. (From the Weekly Health Index, October 16, 1923, issued by the Bureau of the Census, Department of Commerce.)

	Week ended Oct. 13, 1923.	Corresponding week, 1922.
Policies in force	54, 975, 993	50, 824, 469
Number of death claims	7, 901	6, 897
Death claims per 1,000 policies in force, annual rate	7.5	7.1

Deaths from all causes in certain large cities of the United States during the week ended October 13, 1923, infant mortality, annual death rate, and comparison with corresponding week of 1922. (From the Weekly Health Index, October 16, 1923, issued by the Bureau of the Census, Department of Commerce.)

		ended 3, 1923.	Annual death	Death 1	Infant mor- tality	
City.	Total deaths.	Death rate.1	1,000, corre- sponding week, 1922.	Week ended Oct. 13, 1923.	Corresponding week, 1922.	rate, week ended Oct. 13 1923.2
Total	5, 993	10.9	10.9	882	832	
Albany, N. Y. 3	25	11.1	13.9	5	3	11
Atlanta, Ga	70	16. 4	18.7	12	11	
Baltimore, Md. 3	189	12.7	11.8	26	30	7
Birmingham, Ala	32	8.5	11.7	2	5	
Boston, Mass	194	13.1	13, 1	28	37	8
Bridgeport, Conn	32	11.6	7.3	5	3	6
Buffalo, N. Y.	127	12.3	12.1	21	22	8
Cambridge, Mass	21	9, 8	14.1	i	8	i
Camden, N. J. 3	19	8.0	12.0	3	6	5
Chicago, Ill. 3	575	10. 4	9.3	105	71	9
Cincinnati, Ohio	110	14.1	11.7	10	in	6
Cleveland, Ohio 3	160	9.4	9.4	25	41	6
Columbus, Ohio	77	15. 4	14.4	11	6	11
Dallas, Tex.	43	12.6	16.4	14	8	**
Dayton, Ohio	22	6.9	6.4	5	î	8
Denver, Colo.	71	13.6	16.4	10	10	
Des Moines, Iowa	25	9.3	10. 1	8	10	******
Detroit, Mich.	194	10.3	10.0		57	******
		10. 2	10.8	31	31	6:
Duluth, Minn Erie, Pa	7	3.4		3		6
Erie, Pa.	16	7.4	5.7	2	4	4
Fall River, Mass. 8	30	12.9	13.4	7	7	9
Flint, Mich.	24	10.6		6		11
Fort Worth, Tex	29	10.5	10.9	6	0	
Grand Rapids, Mich	23	8.2	12.0	3	8	4
Houston, Tex	30	10.1	13.5	2	3	
ndianapolis, Ind	108	16. 4	9.5	19	9	14
acksonville, Fla.	35	18. 2	14.4	5	3	
	60	10. 1	12.6	6	12	4
Kansas City, Kans	31	14.0	9,6	4	3	9
Kansas City, Mo	82	12. 2	12.4	9	10	
os Angeles, Calif	183	14.3	13.3	19	16	7
Louisville, Ky	55	11.1	13. 8	7	11	7
owell, Mass	36	16.3	16.0	5	8	8
ynn, Mass	20	10. 2		1		2
femphis, Tenn	37	11.3	14.0	4	4	
filwaukee, Wis	89	9.6	9.4	24	17	11
tinneapolis, Minn	71	9.0	9.1	10	7	5
Nashville. Tenn.3	34	14.6	10.4	2	i	
New Bedford, Mass	22	8,8	16, 4	5	13	78
lew Haven Conn	38	11.5	8.0	9	1	117
New Orleans, La	118	15. 2	15, 8	11	18	
lew York, N. Y	1.054	9.3	9.7	132	141	5
Bronx Borough	104	6.5	7.7	10	13	3
Brooklyn Borough	353	8.5	8.6	46	51	49
Manhaitan Borough	484	11.1	11.4	66	64	64
Queens Borough	81	7.9	8.8	7	10	37
Richmond Borough	32	13, 1	14.7	3	3	55

¹ Annual rate per 1,000 population.

² Deaths under 1 year per 1,000 births—an annual rate based on deaths under 1 year for the week and estimated births for 1922. Cities left blank are not in the registration area for births.

³ Deaths for week ended Friday, Oct. 12, 1923.

Deaths from all causes in certain large cities of the United States during the week ended October 13, 1923, infant mortality, annual death rate, and comparison with corresponding week of 1922. (From the Weekly Health Index, October 16, 1923, issued by the Bureau of the Census, Department of Commerce.)—Continued.

		ended 3, 1923.	Annual death rate per	Dent 1	Infant mor- tality	
Norfolk Va. Oakland, Calif. Ookland, Calif. Omaha, Nebr. Paterson, N. J. Pittsburgh, Pa. Pittsburgh, Pa. Portland, Oreg. Providence, R. I. Richmond, Va. Rochester, N. Y. St. Loris, Mo. Salt Lake City, Utah 3. San Francisco, Calif. Seattle, Wash. Spokane, Wash. Spokane, Wash. Spokane, Wash. Spokane, Wash.	Total deaths.	Death rate.	1,000, corre- sponding week, 1922.	Week ended Oct. 13, 1923.	Corresponding week, 1922.	rate, week ended Oct. 13, 1923.
Newark, N. J.	72	8.6	10.5	9	20	42
Norfolk, Va.	29	9.5	8.3	6	6	106
Oakland, Calif	38	8.3	9.8	3	5	39
Omaha, Nebr	40	10.2	13.5	6	2	65
		10.1	9.0	2	2 2	32
	397	10.8	10.4	61	54	79
Plttsburgh, Pa	161	13.7	12.5	28	20	97
Portland, Oreg	51	9. 7	9.7	6	6	61
Providence, R. I.	67	14.4	12.3	12	10	98
Richmond, Va.	48	13.8	12.9	11	5	135
	76	12.5	11.7	10	5	79
	179	11.6	10, 2	22	12	
	14	5.8	13.0	1	3	16
	30	11.0	11.7	6	8	
	122	11.8	12.2	7	7	42
	40	6,6	8.3	1	2	9
spokane, Wash	20	10.0	13.0	1	4	22
Springfield, Mass	28	10. 1	11.2	9	3	129
l'acoma, Wash	15	7.7		2	********	50
Foledo, Ohio	71	13.8	9.4	14	7	141
Frenton, N. J	16	6. 5	14.2	3	3	51
Ctica, N. Y.		14. 1		3		64
Washington, D. C	114	13.6	10.6	15	9	86
Wilmington, Del	18	8.0	10.4	1	4	20
Worcester, Mass		10.6	8.6	13	4	149
Youngstown, Ohio	26	10.2	11.8	7	6	95

² Deaths for week ended Friday, Oct. 12, 1923.

PREVALENCE OF DISEASE.

No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring.

UNITED STATES.

CURRENT STATE SUMMARIES.

These reports are preliminary and the figures are subject to change when later reurns are received by the State health officers.

Reports for Week Ended October 20, 1923.

ALABAMA.		CALIFORNIA.	
	ises.		ses.
Chicken pox		Botulism—Los Angeles	1
"Devil's grip"		Diphtheria	190
Diphtheria		Influenza.	13
Dysentery		Jaundice (epidemic)	2
Influenza		Leprosy—Sacramento	1
Malaria		Lethargic encephalitis—San Bernardino County	
Measles		Measles	185
Mumps	23	Poliomyelitis:	
Pellagra		Berkeley	1
Pneumonia	30	Burbank	1
Scarlet fever	33	Long Beach	2
Smallpox	4	Los Angeles	6
Tuberculosis	20	Los Angeles County	2
Typhoid fever	46	Scarlet fever	115
Whooping cough	34	Smallpox:	
		Los Angeles	14
ARIZONA.		Scattering	13
Chieken pox	4	Typhoid fever	15
Diphtheria	10	Typhus fever—Los Angeles	2
Measles	3	COLORADO	
Mumps	2	COLORADO.	
Scarlet fever	6	(Exclusive of Denver.)	
Tuberculosis	1	Chicken pox	8
Typhoid fever	2	Diphtheria	21
		Measles	47
ARKANSAS.		Mumps	12
Chicken pox		Scarlet fever.	8
Diphtheria	37	Smallpox	2
Influenza	25	Tuberculosis	54
Malaria	140	Typhoid fever	5
Measles	23		-
Paratyphoid fever	2	CONNECTICUT.	
Pellagra	2	Cerebrospinal meningitis	2
Poliomyelitis	1	Chieken pox	27
Scarlet fever	9	Conjunctivitis (infectious)	2
Smallpox	1	Diphtheria	48
Trachoma	2	Favus	1
Tuberculosis	22	Influenza	1
Typhoid fever	32	Lethargic encephalitis	1
Whooping cough	8	Measles	47
	(24	81)	-

connecticut—continued.	ses.	ILLINOIS—continued.	
		Poliomyelitis-Continued. Ca	ses.
Mumps		Macon County	
Pneumonia (lobar)		Morgan County	
Poliomyelitis			
Scarlet fever	62	Sangamon County	2
Septic sore throat	1	Scarlet fever:	
Tetanus	. 1	Cook County	
Tuberculosis (all forms)		Lake County	8
Typhoid fever		McLean County	23
Whooping cough		Vermilion County	8
whooling coagn		Scattering	120
DELAWARE.		Tuberculosis	
Chicken pox	5	Typhoid fever	
Diphtheria		Whooping cough	
		whooping cough	120
Malaria		INDIANA.	
Scarlet fever:		Diphtheria	124
Wilmington		Measles	21
Seattering	4	Poliomyelitis:	
Tuberculosis	5	Tippecance County	1
Typhoid fever	3	Warren County	1
Whooping cough	1	Scarlet fever.	64
		Smallpox	15
FLORIDA.		Tuberculosis	74
Diphtheria	24		
Influenza		Typhoid fever	17
Malaria		IOWA.	
Pneumonia		Diphtheria	36
Poliomyelitis		Scarlet fever	51
		Smallpox	2
Typhoid fever	10	Typhoid fever	6
GEORGIA.			
	1	KANSAS.	-
Chicken pox		Chicken pox	23
Diphtheria		Diphtheria	
German measles		German measles	2
Hookworm disease	13	Measles	71
Influenza	4	Mumps	13
Malaria	83	Pneumonia	11
Measles	59	Poliomyelitis	5
Mumps	6	Scarlet fever	91
Pneumonia	15	Smallpox	18
Scarlet fever	19	Tuberculosis	24
Septic sore throat	1	Typhoid fever	19
	11	Whooping cough	62
Smallpox		w mooping cough	02
Tuberculosis (pulmonary)		LOUISIANA.	
Typhoid fever		Dengue	26
Typhus fever		Diphtheria	44
Whooping cough	11	Influenza	9
		Leprosy	2
ILLINOIS.		Malaria	15
Garden de la companie	1	Measles.	35
Cerebrospinal meningitis—Rock Island County		Pneumonia	42
Diphtheria:		Scarlet fever	5
Cook County			
Gallatin County	8	Smallpox	6
Kane County	14	Tuberculosis	30
Madison County	13	Typhold fever	20
Scattering	101	MAINĖ.	
Influenza	37	Chicken pox.	19
Measles	69	Diphtheria	15
Pneumonia:		Influenza	1
	110	Measles.	19
Chicago			3
Scattering	80	Mumps	
Poliomyelitis:	- 1	Pneumonia	6
Champaign County	1	Poliomyelitis	2
Cole County	1	Scarlet fever	27
Cook County	3	Tuberculosis	7
Dekalb County	1	Typhoid fever	7
Kane County	1	Whooping cough	21

Carebrospinal meningitis 1 Crebrospinal meningitis (epidemic) 1 Diphtberia 155 Chicken pox 36 Epidemic sore throat 1 1 Diphtberia 66 Diphtberia 7 Diphtberia 67 Diphtberia 7 Diphtberia 68 Diphtberia 7 Diphtberia 69 Diphtberia 7 Malaria 9 Penemonia 11 Measles 25 Poliomyelitis 2 Mumps 2 Mumps 2 Mumps 2 Mumps 2 Mumps 3 Sarete (see 184 Nanalpox 10 Saratet (see 184 Nanalpox 10 Saratet (see 184 Nanalpox 10 Saratet (see 184 Nanalpox 10 Tuberculosis 68 Tuberculosis 32 Typhoid (see 17 Tuberculosis 32 Typhoid (see 17 Tuberculosis 34 Tuberculosis 68 Tuberculosis 44 Crebrospinal meningitis 45 Creditis (suppurative) 15 Diphtberia 13 Creditis (suppurative) 15 Saratet (see 10 Mumps 20 Diphtberia 15 Diphtberia 20 Diphtberia 15 Diphtber	MARYLAND,1	0	MISSOURI.
Crebrospinal meningitis (epidemic)	Combrownius I manipulate		
Diphtheria			
Diphtheria			
Dysentery			Epidemic sore throat
Malaria			
Malaria			
Manys 3 3 3 3 3 3 3 3 3			
Mumps			
Preumonia (all forms)			
Tetanus			
Tuberculosis. 32 Tuberculosis. 32 Tuperculosis. 32 Tuperculosis. 32 Whooping cough. 49 Whooping cough. 49 Whooping cough. 49 Crebrospinal meningitis. 4 Chicken pox. 66 Coigunetivitis (suppurative). 15 Diphtheria. 227 Tiphoid fever. 23 Influenza. 4 Lethargie encephalitis. 4 Leth			
Typhoid fever. 50			
Whooping cough 122			
Monoping cough			Typhoid fever 57
Diphtheria			
Diphtheria 13 13 13 13 13 13 13 1	Whooping cough	49	MONTANA.
Cerebrospinal meningitis	MASSACHUSETTS.		Dinhtheria 13
Chicken pox			Poliomyelitis_1 ibby
Conjunctivitis (suppurative)			Scarlet fever. 23
Tophotheria 10 Tophotheria 257 German measles 3 Influenza 4 Lethargic encephalitis 4 Lethargic encephalitis 4 Malaria 1 Dysentery 1 16 Measles 156 Mumps 59 Ophthalmia neonatorum 22 Measles 110 Mumps 59 Measles 111 Influenza 13 13 Mumps 59 Measles 114 Pneumonia (lobar) 56 Pneumonia 45 Pneumonia 45 Scarlet fever 156 Scarlet fever 20 Mooping cough 10 Minnes 10 Mumps 10			Smallpox
Comman measles			Typhoid fover
Influenza			
Lethargic encephalitis			
Malaria 1 Dysentery 1 Measles 140 1 Mumps 59 Malaria 3 Ophthalmia neonatorum 22 Measles 114 Pneumonia (lobar) 56 Fneumonia 46 Poliomyelitis 13 Poliomyelitis 12 Scarlet fever 156 Scarlet fever 66 Septie sore throat 8 Tachoma 1 Trachoma 2 Typhoid fever 22 Whooping cough 37 Whooping cough 37 Diphtheria 233 Measles 20 Pneumonia 60 Minmps 12 Samalpox 30 Minmps 12 Typhoid fever 27 Poliomyelitis 1 Typhoid fever 27 Poliomyelitis 1 Typhoid fever 27 Poliomyelitis 1 Typhoid fever 27 Tuberculosis 19 Typhoid fever 20 Poliomyelitis <td></td> <td></td> <td>1</td>			1
Mounts			
Mumps			
Ophthalmia neonatorum 22			
Pneumonia (lobar) 56			
Poliomyelitis			
Scarlet fever. 156 Scarlet fever. 66 Septic sore throat. 8 Trachoma 1 Trachoma 2 Typhoid fever 22 Tuberculosis (all forms) 170 Whooping cough 37 Typhoid fever 20 Whooping cough 37 Typhoid fever 20 Whooping cough 37 Typhoid fever 27 Tuberculosis 28 Tuberculosis 29 Tuberculosis 29 Tuberculosis 29 Tuberculosis 20			
Trachoma			
Trachoma 2 Typhoid fever 22 Typhoid fever 20 Whooping cough 37 Whooping eough 73 NEW MEXICO. 37 Diphtberia 233 MCHIGAN. Diphtheria 3 Diphtberia 260 Murps 12 Pneumonia 60 Scarlet fever 26 Paratyphoid fever 3 Smallpox 30 1 Poliomyelitis 1 Typhoid fever 27 Tuberculoeis 1 Poliomyelitis 1 Typhoid fever 27 Tuberculoeis 19 New york 1 Chicken pox 20 Tuberculoeis 19 New york 1 Influenza 1 (Exclusive of New York City.) 1 Measles 205 New york 1 Pneumonia 2 1 (Exclusive of New York City.) 2 Poliomyelitis 2 Diphtheria 21 Scarlet fever 26 Diphtheria 25 <tr< td=""><td></td><td></td><td></td></tr<>			
Typhoid fever			Trachoma 1
Typhoid fever			Typhoid fever
Michigan 233 Diphtheria 3 3 3 3 3 3 3 3 3			Whooping cough
Michigan	Typhoid fever	20	NEW MEXICO
Diphtheria 233 Diphtheria 7 Measles 209 Measles 209 Mumps 12 20 Mumps 12 20 Mumps 22 22 22 22 23 23 23 2	Whooping eough	73	
Measles 208 Measles 208 Mumps 12	MICHIGAN.		
Mumps			
Paratyphoid fever 3 3 3 3 3 3 3 3 3			
Preumonia 1			
Poliomyelitis 1 Scarlet fever 2 Tuberculosis 1 Scarlet fever 2 Tuberculosis 1 Tuberculosis 2 Tuberculosis 4 Tuberculosis 5 Tubercul	Scarlet fever	226	
Scarlet fever. 27 Tuberculosis. 19 Tuberculosis. 19 Tuberculosis. 19 Tuberculosis. 19 Tuberculosis. 19 Tuberculosis. 17 Tuberculosis. 17 Tuberculosis. 17 Tuberculosis. 18 Tuberculosis. 19 Tuberculosis. 10 Tuberc			
Tuberculosis 19	Tuberculosis	198	
Whooping cough	Typhoid fever	27	
Chicken pox	Whooping cough	61	
Chicken pox	MINNESOTA.		Whosping cough
Influenza	Chicken pox		Transparis conguestics 1
Measles. 205 (Exclusive of New York City.)			NEW YORK.
Preumonia 2 2 2 2 2 2 2 2 2			(Evelusive of New York City)
Poliomyelitis 2 Diphtheria 218			
Scarlet fever 256			
Smallpox. 19 Lethargic encephalitis. 6 Trachoma. 1 Measles. 253 Tuberculoris. 44 Poliomyelitis. 29 Whooping cough. 9 Scarlet fever. 176 Diphtheria. 57 Typhoid fever. 33 Diphtheris. 1 North Carolina. Scarlet fever. 10 Chicken pox. 11 Smallpox. 5 Diphtheria. 297 Typhoid fever. 7 German measles. 5			
Trachoma	Scarlet fever	256	
Tuberculocis			
Typhoid fever	Trachoma	1	
Whooping cough 9 Scarlet fever 176 Diphtheria 57 Typhoid fever 33 Poliomyelitis 1 North Carolina 187 Scarlet fever 10 Chicken pox 11 Smallpox 5 Diphtheria 297 Typhoid fever 7 German measles 5	Tuberculoris	44	
Scarlet fever. 176	Typhoid fever	16	
Diphtheria 57 Typhoid fever 33 Whooping cough 187			
Diphtheria			
Poliomyelitis		57	Whooping cough
Scarlet fever. 10 Chicken pox. 11 Smallpox. 5 Diρhtheria 297 Typhoid fever. 7 German measles 5			NORTH CAROLINA
Typhoid fever	Scarlet fever	10	
Typhoid fever	Smallpox	5	Diphtheria
	**		,

¹ Week ended Friday.

NORTH CAROLINA—continued.		VIRGINIA.	
Co	ases.		ses.
Measles		Loudoun County	2
Scarlet fever		WASHINGTON.	
Septic sore threat			
Smallpox		Chicken pox	61
Typhoid fever	31	Diphtheria:	-
Whooping cough	216	Seattle	27
OREGON.		Scattering	7
Chicken pox	12	Measles	19
Diphtheria:		Mumps	2
Portland	10	Scarlet fever:	10
Place not stated		Spokane	10
Measles		Scattering	26 8
Mumps		Smallpox	
Pneumonia		Tuberculosis	17
Scarlet fever:		Typhoid fever	17
Portland	11	Whooping cough	7
Scattering	6	WEST VIRGINIA.	
Smallpox	8	Diphtheria	23
Tuberculosis		Scarlet fever.	31
Typhoid fever		Typhoid fever	
Whooping cough			
		WISCONSIN.	
Chicken nor	4	Milwaukee:	
Chicken pox		Chicken pox	27
*	8	Diphtheria	28
Measles.	19	Lethargic encephalitis	1
Scarlet fever		Meastes	1
Tubereulosis	3	Pneumonis	2
Whooping cough	3	Scarlet fever	19
TEXAS.		Smallpox	4
Chicken pox	2	Tuberculosis	10
Dengue		Whooping cough	19
Diphtheria		Scattering:	
Dysentery		Cerebrospinal meningitis	2
Influenza	35	Chicken pox	51
Measles	33	Diphtheria	
Mumps	9	German measles	8
Peilagra	2	Influenza	5
Pneumonia	6	Measles	
Scarlet lever	8	Pneumonia	3
Smallpox	1	Poliomyelitis	3
Tuberculosis	13	Scarlet fever	
Typhoid fever	8	Smallpox	14
Whooping cough	12	Tuberculosis	24
VERMONT.		Typhoid fever	11
Chieken pox	8	Whooping cough	82
Diphtheria	7		
Measles	84	WYOMING.	
Mumps	2	Measles	5
Scarlet fever	11	Scarlet fever	2
Smallpox	6	Typhoid fever	4
Whooping cough	40	Whooping cough	2
		1.10.11.10.1000	
	En	ded October 13, 1923.	
DISTRICT OF COLUMBIA. Ca	868.	NEBRASKA. Cas	ses
Diphtheria	19	Chicken pox	3
Lethargic encephalitis	1	Diphtheria	42
Measles	2	German measles	1
Poliomyelitis	2	Lethargic encephalitis	1
Scarlet fever	11	Measies	13
Smallpox	1	Mumps	7
Tuberculosis	23	Pneumonia	1
Typhoid fever	6	Poliomyelitis	6
Whooping cough	12	Scarlet fever	36
Deaths.		A STATE OF THE PARTY OF THE PAR	
· Deatils.			

NEBRASKA—continued.	es.	NORTH DAKOTA—continued.	508.
Smallpox	1	Measles	35
Typhoid fever	1	Pneumonia	
Whooping cough	9	Scarlet fever.	32
NORTH DAKOTA.		Tuberculosis	
Chicken pox	7		
Diphtheria	11	Whooping cough	

SUMMARY OF CASES REPORTED MONTHLY BY STATES.

The following summary of monthly State reports is published weekly and covers only those States from which reports are received during the current week:

State.	Cerebrospinal meningitis.	Diphtheria.	Influenza.	Malaria.	Measles.	Pellagra.	Poliomyelitis.	Scarlet fever.	Smallpox.	Typhoid fever.
September, 1923. Delaware	1 25 2 7	9 26 129 460 788 817 37 1,132 43	5 8 2 63	29 27	5 7 85 337 627 510 57 459 20	1	3 1 17 196 2 3 49	17 26 112 738 527 288 49 722 25	19 7 34 7 52 5	17 20 226 67 409 206 31 448

RECIPROCAL NOTIFICATION, SEPTEMBER, 1923.

Cases of communicable diseases referred during September, 1923, to other State health departments by departments of health of certain States.

Referred by—	Para- typhoid fever.	Polio- myelitis.	Scarlet fever.	Tubercu- losis.	Typhoid fever.	Whoop- ing cough.
ConnecticutIllinois.			2	46	2	
Minnesota New Jersey		1		73	5 3	
New York Ohio	1		1		3 2	

CITY REPORTS FOR WEEK ENDED OCTOBER 6, 1923.

CEREBROSPINAL MENINGITIS.

The column headed "Median for previous years" gives the median number of cases reported during the corresponding week of the years 1915 to 1922, inclusive. In instances in which data for the full eight years are incomplete, the median is that for the number of years for which information is available.

	Median for pre-			City.	Median for pre-	Week ended Oct. 6, 1923.	
		Cases.	Deaths.		years.	Cases.	Deaths.
California: Los Angeles	0	1		New Jersey : Garfield	0		1
Georgia: Atlanta Maryland:	0		1	Jersey City Newark New York:	0	1	1
Baltimore	0	1		New York	3	1	
BostonFall River	0	1	i	BradfordWilkes-Barre	0	1 2	
Woburn Minnesota:	0	******	1	Texas: San Angelo	0		1
Minneapolis	0	1	1	Wisconsin: Manitowoc. Milwaukee	0	1	
Kansas City	0	1		milwaukee	0	3	

CITY REPORTS FOR WEEK ENDED OCTOBER 6, 1923-Continued.

DENGUE.

City.	Cases.	Deaths.
Texas: San Antonio,	2	

DIPHTHERIA.

See p. 2492; also Current State summaries, p. 2481, and Monthly summaries by States, p. 2485.

INFLUENZA.

City. Weel ender Oct. 7	Cases.		Deaths,		Cases.		Deaths.
	Week ended Oct. 7, 1922.	Week ended Oct. 6, 1923.	week ended Oct. 6, 1923.	City.	Week ended Oct. 7, 1922.	Week ended Oct. 6, 1923.	week ended Oct. 6, 1923.
Alabama:				Massachusetts-Con.			
Birmingham		10		Brookline		1	
Mobile			1	Fall River		1	1
Arkansas:			- 1	Greenfield	2		
Little Rock	9			Lowell			
California:	1			Quincy			
Eureka	1			Michigan:		-	
Los Angeles	9	8		Detroit	2		
San Francisco.				Missouri:	-	*******	
Connecticut:			*******	St. Louis		1	1 .
New Britain	5		1	New Jersey:			
	9			Kearny		1	
Florida:				Kearny		2	
Tampa		2		Newark	5	2	
Georgia:				New York:	1		-
Atlanta		. 1		Albany			
Savannah		1		Buffalo		1	
Illinois:			. 1	Mount Vernon		1	1
Champaign				New York	18	12	:
Chicago	8	6	1 1	Ohio:			
Indiana:				Cleveland	1		
Kokomo			1	Columbus			1
Kansas:			-	Toledo			1
Wichita	1			Pennsylvania:			
Louisiana:	-			Philadelphia	2		
Baton Rouge	1			Fittsburgh			1
New Orleans	3	2		Rhode Island:			
Maryland:		-		Providence	9		
Baltimore	5			Texas:	•		
Frederick	1	*******		Waco			1
Massachusetts:	1	*******	*******	Wisconsin:	******	*******	,
				Kenosha			
Boston	1			Kenosna	1		

LEPROSY.

City.	Cases.	Deaths.
California: San Francisco.	1	

LETHARGIC ENCEPHALITIS.

California:	
San Francisco.	
Oregon: Portland	1

CITY REPORTS FOR WEEK ENDED OCTOBER 6, 1923-Continued.

MALARIA.

City.	Cases.	Deaths.	City.	Cases.	Deaths.
Alabama: Anniston Birmingham Dothan Montgomery Tuscaloosa Arkansas: Little Rock California: Los Angeles Sacramento. San Diego San Francisco. Florida: Tampa	3 28 2 2 2 2 2 1 4 2 1 1	2	Georgia: Atlanta. Augusta. Savannah Lonisiana: New Orleans Maryland: Bultimore. New Jersey: Jersey City New York: New York Tennesse: Memphis Texas: Dullas.	2 2 2 1 6 3 1 2 14	

MEASLES.

See p. 2492; also Current State summaries, p. 2481, and Monthly summaries by States, p. 2485.

PELLAGRA.

City.	Cases.	Deaths.	City.	Cases.	Deaths.
Alabama: Mobile	1	1 1 1 1	New York: Scheneetady. Pennsylvania: Philadelphia. South Carolina: Columbia Texas: Houston Virginia: Norfolk.	1	

PNEUMONIA (ALL FORMS).

Alabama:		Illinois:	1
Birmingham 6	1	Alton	. 1
Montgomery	. 1	Chicago 105	34
Californiac	1	East St. Louis	. 5
Bakers feld	. 1	Oak Park	. 2
Euroka 1	**********	Quincy	. 1
Long Beach	. 1	Springdeld 1	
Los Ang l.s	19	Indiana	
Oakland	. 7	East Chicago	. 2
Pasadona 1	1	Hammond	i ī
Sacramento	3'	Indianapolis] 3
San Diego 4	. 2	La Fayatte	1 1
San Francisco 8	1 2	Terro Haute	1 î
Colorado:	1	Kansas	1 .
Denver	3	Wichita	9
Pueblo	1 1	Kentucky:	-
Connecticut:		Lexington	
Bridgeport	1	Louis /illo	1 -
Hartford		Louisiana:	,
New Haven		New Orleans 5	1
Waterbury		Maine:	
District of Columbia:	1	Hangor	
Washington	7	Biddeford.	1 1
Florida	1 '	Portland	1 1
Tamps		Maryland:	3
Georgia			
Atlanta 6		Baltimore	15
	4	Massachusetts:	
Augusta	2	Boston	14
Brunswick	1	Braintree 1	
Savannah	1 3	Brookline	

CITY REPORTS FOR WEEK ENDED OCTOBER 6, 1923--Continued.

PNEUMONIA (ALL FORMS)-Continued.

City.	Cases.	Deaths.	City.	Cases.	Dea
Manager Manager Continued			New York-Continued.		
Massachusetts-Continued.					
Cambridge		2	Olean		
Chelsea	2		Poughkeepsie	1	
Danvers	1		Rochester	5	
Everett	1		Schenectady	1	
Haverhill		2	Syracuse		
Holyoke		2	Troy		
Lowell		2 1 2 1	Watertown		
Lynn	3	2	Yonkers		
Malden		1 1	North Carolina:		
Medford		1 0	Durham		
Mourton		2 2 2 1			
Newton	********	2	Raleigh	********	1
North Adams		2	Winston-Salem		
Plymouth			Ohio:		
Quiney		1	Barberton		
Salem	2		Cincinnati		
Somerville		1	Cleveland	16	
Springfield	1		Cleveland Heights	2	
lichigan:			Cleveland Heights		
Ann Arbor	1		Dayton	1	
Battle Creek	i		Dayton East Cleveland	2	
Detroit		90	Hamilton	2	
Detroit	33	30			
Grand Rapids	5	*******	Mansfield		
Hamtram ck		2	Newark		
Highland Park		1	Toledo		
Jackson		1	Zancsville		
Pontiac	1		Pennsylvania:		
linnesota:			Philadelphia	33	
Duluth	2		Pittsburgh		
St. Paul	-	5	Rhode Island:		
(issouri:		"	Newport		
Kansas City	10	6	Pawtucket		
Et Locards	10				
St. Joseph		1	Providence		
Iontana:			South Carolina:		
Missoula		1	Charleston		
Nebraska:			Columbia		
Lincoln		1	Tennessee:		
Omaha		2	Memphis		
ew Hampshire:		-	Nashville		
Keene		1	Texas:		
ew Jersey:			Dallas	1	
Atlantic City		1	Houston		
Camden			Can Antonio	********	
Elizabeth		1	San Antonio		
		1	Waco		
Hoboken		1	Utah:		
Jersey City	3	********	Salt Lake City		
Montciair	1	********	Vermont:		
Newark	21	5	Burlington		
Passaie		2	Virginia:		
Paterson	4		Lynchburg		
Perth Amboy		1	Norfolk		
Trenton		1	Petersburg		
ew York:			Richmond		
Albany	2		West Virginia:	*******	
Amsterdam	2	********	Charleston		
	15		Charleston		
Buffalo	19		Clarksburg		
Cohoes		1	Huntington		
Elmira	1		Parkersburg		
Hornell		1	Wheeling		
Ithaca	1		Wisconsin:		
Jamestown		1	Jarlesville		
Lackawanna	3		Kenosha		
Mount Vernon	9	1	Milwankee	9	
New York.	102	91	Racine	-	
ATUN AURALIANA AND AND AND AND AND AND AND AND AND	102	1/1	Avacine		

CITY REPORTS FOR WEEK ENDED OCTOBER 6, 1923-Continued.

POLIOMYELITIS (INFANTILE PARALYSIS).

The column headed "Median for previous years" gives the median number of cases reported during the corresponding week of the years 1915 to 1922, inclusive. In instances in which data for the full eight years are incomplete, the median is that for the number of years for which information is available.

City. for pre-	Median for pre-	Week ended Oct. 6, 1923.		City.	Median for pre- vious	Week ended Oct. 6, 1923.	
	years.	Cases.	Deaths.		years.	Cases.	Deaths.
California:				Missouri:			
Long Beach	0	1		St. Joseph	0	1	1
Los Angeles	0	8	1	Montana:			
Sacramento Connecticut:		2		Billings Nebraska:	0	1	
New London	0		1	Omaha	0	1	
Waterbury	0	1		New Jersey:			
District of Columbia:				Jersey City	0	1	
Washington	0	4		Kearny	0	2	
Illinois:				Newark	0	4	
Chicago	3	6		New York: Buffalo		-	
Decatur	0		1	Bullalo	0	1	
ElginIndiana:	0	1		Mount Vernon	0	1	******
Gary				New York	9	24	,
Gary	0			Peekskill	0		
Kansas: Topeka				Rochester	0	1	
Massachusetts:	0	1		Syracuse	0	1	
Boston	1	4		Hamilton	0		1
Lowell	0	3	1	Pennsylvania:			
Newton	0	1		Philadelphia	0	2	
Westfield	0	1		Pittsburgh	0	2	
Michigan:				Washington:			
Grand Rapids	0	1		Seattle	0	2	
Minnesota:				West Virginia:			
Duluth	0	1		Clarksburg	0	1	
Minneapolis	0	1					
Rochester	0	1					

RABIES IN ANIMALS.

City.	Cases.	City.	Cases.
California: Los Angeles. Kentucky: Owensboro. Massachusetts: Arlington. Missouri: Kansas City.	3 1 2 2	New Jersey: Bloomfield North Carolina: Raleigh Tennessee: Memphis. Texas: Dallas	

SCARLET FEVER.

See p. 2492; also Current State summaries, p. 2481, and Monthly summaries by States, p. 2485.

CITY REPORTS FOR WEEK ENDED OCTOBER 6, 1923-Continued.

SMALLPOX.

The column headed "Median for previous years" gives the median number of cases reported during the corresponding week of the years 1915 to 1922, inclusive. In instances in which data for the full eight years are incomplete, the median is that for the number of years for which information is available.

City.	Median for pre- vious		6, 1923.	City.	Median for pre- vious		ended 3, 1923.
	years.	Cases.	Deaths.		years.	Cases.	Deaths
Alabama:	0			New York: New York	0		
Birmingham	0	1	*******	Peekskill	0	1	
California:		-		North Dakota:	*******	1	
Los Angeles	0	:	*******	Grand Forks	0		1
San Diego	0	1		Ohio:	0	1	
Georgia:							1
Atlanta	1	1		Cambridge		1	
Macon,	0	1		Chillicothe	0	1	
Illinois:				Cleveland	1	1	
Chicago	0	1	*******	Columbus	0	1	
Peoria	0		1	Mansfield	0	1	
Indiana:				Stenbenville	0	1	
Gary	0	1		Oregon:			1
Indianapolis,	2	1	*******	Portland	2	2	
Muncie	0	4		Pennsylvania:			
South Bend	0	1		Chester	0	1	
owa:				Philadelphia	0	õ	
Clinton	0	1		Pittsburgh	0	1	
Maryland:				Vermont:			
Baltimore	0	1		Burlington	0	5	
Michigan:		1		Washington:			
Detroit	2	3		Seattle	2	1	
Grand Rapids	0	4		Wiscousin:		_	
Highland Park	0	1		Milwaukee	1	17	
Holland	0	10		Racine	Ô	i	
Muskegon	0	9				•	
Minnesota:	0	-					
Duluth	0	5					
St. Paul.	5	30					

TETANUS.

City.	Cases.	Deaths.	City.	Cases.	Deaths
Illinois: Chicago Massachusetts: Lowell. Missouri: Kansas City St. Joseph Nebraska: Omaha	1 1 1	1 1 1 1	New York: New York. Schenectady. South Carolina: Columbia. Texas: Houston.	1	

TUBERCULOSIS.

See p. 2492; also Current State summaries, p. 2481.

CITY REPORTS FOR WEEK ENDED OCTOBER 6, 1923—Continued. TYPHOID FEVER.

The column headed "Median for previous years" gives the median number of cases reported during the corresponding week of the years 1915 to 1922, inclusive. In instances in which data for the full eight years are incomplete, the median is that for the number of years for which information is available.

City.	Median for pre-		c ended 6, 1923.	City.	Median for pre- vious		ended 3, 1923.
eng.	years.	Cases.	Deaths.		years.	Cases.	Death
labama:				New Jersey—Continued. Jersey City Long Branch			
Birmingham	4	4		Jersey City	1 0	1	
Dothan		1	3	Long Branch	5		
Mobile	0		3	Newark	0	ī	******
rkansas:				Perth Amboy	0		******
Little Rock	1			New Mexico: Albuquerque	6	6	
California:	0		1	New York:		0	1
EurekaLos Angeles	2	7		Albany	1	4	
Coblema	î	i		Amsterdam		i	
Oakland	0	2		Buffalo	1	î	
Pasadena San Francisco		2		Buffalo Jamestown	i i		
olorado:			1	New York	44	34	
Denver	4	8	2	Rochester		2	
Pueblo	2	1		Schenectady	0	1	
Pueblo Trinidad	ō	2		Syracuse	3	3	
onnecticut:	_	1		Watertown	0	2	
Danbury	0	1		North Carolina:			
Hartford	3	2		Greensboro	0	1	
New Haven	2	8	2	Greensboro Winston-Salem	1	4	
New Haven istrict of Columbia:		1		Ohio:		-	
Washington	9	1	1	Cambridge Cincinnati	1	2	
eorgia:				Cincinnati	3	1	
Atlanta	2	. 3	2	Dayton	1	1	
Lagrange		2		Hamilton	0	1	
Savannan	0	4		Lorain	0	0	*****
linois:				Lorain	0	3	
Aurora	0	1		New Philadelphia	3	î	
Chicago Evanston	11	5		Oklahoma:	0		1
Evanston	0	1	*******	Oklahoma	1	1	
Kewance	0	i	******			î	
Peoria	0	2		Oregon:			1
Quincy Springfield	i	1		Portland	2	2	
ndiana:		•		Oregon: Portland Pennsylvania:	-	-	1
Indiananolis	2	2		Carlisle	0	1	
Indianapolis Kokomo	ī	ī		Carlisle Chambersburg	0	1	
Mishawaka	ō	2	·····i	Chester	1	1	
Terre Haute	Ö	2 2		Chester	0	1	
owa:				Jeannette	0	1	
Sioux City	0	1		Johnstown	1	2	
ansas:				Lancaster	0	1	
Fort Scott	0	1	1	New Kensington Philadelphia Pittsburgh	0	1	
Kansas City	1	7		Philadelphia	19	10	
Lawrence	0	1		Pittsburgh	6	2	
Parsons	0	1	*******	Sharon		i	
entucky: Covington				York			
Covington	0	3		Rhode Island: Cranston	0	1	
Louisville	6 2	i		South Carolina;		•	1
Owensboro	-			Charleston	1	1	
New Orleans	3	4		Columbia	ī	2	
laryland;		-		Greenville	0	1	
Baltimore	15	6	3	Tennessee:			1
assachusetts:			1	Chattanooga	0	1	
Boston	8	10		Memphis	2	5.	1
Cambridge	0	1		Texas:			1
Chelsea. Fall River	0	1		Galveston	0	1	
Fall River	4	2 2		San Antonio		1	
Lowell	1	2		Virginia:			1
ichigan:				Petersburg	1	1	
Detroit	8	5	1	Richmond	1	1	
Grand Rapids Highland Park	1	1	*******	Washington:	2	3	
Highland Park	0	2	*******	Seattle	i	1	*****
Muskegon	2	1	******	Tacoma			
innesota:				West \ irginia: Bluefield	1		
Minneapolis	2 3	1	1	Charleston		1	
St. Paul	3	1	1	Clarksburg	o	i	
issouri:	3	5		Fairmont	0	i	
Kansas City	7	5		Huntington	i	2	
St. Louis	'	9	*******	Martinsburg		î	
Iontana:	0		1	Wheeling	2	i	
Missoula	0	*******	1	Wisconsin:	1		
lew Jersey: Camden	2	3		Appleton	0	1	
- Camadellassassassassassassassassassassassassas	0	1			1 0		

CITY REPORTS FOR WEEK ENDED OCTOBER 6, 1923-Continued.

TYPHUS FEVER.

City.	Cases.	Deaths.
Georgia: Savannah New York:	1	
New York	2	

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS.

	Populs-	Total deaths	Dipl	htheria.	Me	asles.		arlet ver.		ercu- sis.
City.	tion Jan. 1, 1920.	from all causes.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Alabama:										
Anniston	17,734	4	4						. 2	
Birmingham	178, 806	40	16	2	3	1	5		. 5	1
Dothan	10, 034	25			15		1			
Mobile	60, 777 43, 461	8	3 2		1		1			
Tuscaloosa	11, 996		1 4				3			
Arkansas:	11, 500		,		*****		0	*****		
Fort Smith	28, 870	1	1		1					
Little Rock	65, 142		3							
Little Rock	14,048		ı		1				1	
California:		1							1	1
Alameda	28,896	2	1		11		1		1	
Bakersfield	18,638	9	2				3			1
Eureka	12, 923 13, 536	5	2		19		1		5	
Glendale	13, 536	10								
Long Beach	55, 593	26	3		1		2			1
Los Angeles	576, 673	180	71 19	3	5 2		9			2
Pasadena	216, 261 45, 354	58	19	1	2		7 5			1
Richmond	16, 843	3	i	*****	2	*****	a		1	2
Riversido	19, 341	3	i		10		1			
Sacramento	65, 908	16	3	*****	10		4		1	
San Bernardino	18,721	6			*****		3			
San Diego	74,683	21	1		*****		1			
San Francisco.	506, 676	120	30	2	94	2	î			12
Santa Ana	15, 485	6	1		1					
Santa Barbara	19,441	3								
Santa Cruz	10, 917	4					1			
Stockton	40, 296	11	2				6			
Colorado:										
Denver	256, 491	60	29	3	1		13			11
Pueblo.	43,050	12	5	2					4	
Trinidad	10,906		2					*****		
Bridgeport	143, 555	33	8							
Bristol	20,620	4	3		····i	*****	3		5	2
Danbury (town)	22, 325	8	3				*****	*****	9	*****
Danbury (town)	11, 475	2	*****	*****	*****		*****		· · · · i	
Hartford	138, 036	24					3	*****		4
Milford (town)	10, 193	i						*****		
New Haven.	162, 537	48	2				6		6	2
New London	25,688	5							1	
Norwalk	27,743	8								
Waterbury	91,715	21	4		1		7			1
District of Columbia:			-							
Washington	437, 571	120	12	2	2		7		27	13
florida:		-			_					
St. Petersburg	14, 237	3		*****	3	*****			1	
Tampa	51,608	18	1	*****	2	*****			1	1
leorgia: Albany	11,555				1				1	
Atlanta	200, 616	48	9		3		6		7	
Augusta	52, 548	22	3	*****	2				i	2
Brunswick	14, 413	3	1	*****	i		-			
Macon	52, 995		4		-				4	
Rome	13, 252		2							• • • • •
Savannah	83, 252	24	2				1		2	
daho:	,		-				- [-	
Boise	21, 393	2							1	

	Popula-	Total deaths	1	htheri	a. Me	asles.		arlet ver.	Cui	iber- losis.
City.	tion Jan. 1, 1920.	from all causes	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Illinois:										
Alton	24,682	6	1	2	1 2		. 1			
Aurora. Bloomington.	36, 397 28, 725 12, 491 2, 701, 705	10		3						
Centralia.	28,725	6			1		- 4			
Chicago	2 701 705	541	10		6	i	33	1	239	34
Cicero.	99, 999	5			. 0	1	. 1	1	239	34
Decatur	43, 818 66, 767	8					3		6	*****
East St. Louis	66, 767	24	1	l			. 1		3	2
Elgin	27, 454	, 10			. 1					
Evanston	37, 234 19, 669	5 5	1		. 1	*****	i i		1	
Gaksburg.	23, 834	8					1		*****	*****
Galesburg. Jacksonville	23, 834 15, 713	6	1				. 2		1	1
Kewanee	16,026	5	2		. 1					
La Salle	13, 050						. 1			
Oak Park	39, 858 76, 121	21	1				1			1
Quincy Rock Island	35 978	8	****				1 3	1		*****
Rock Island	25, 978 35, 177	4	1		. 1	*****	. 0		*****	
Procedure and a second	65, 651	14	2		1				*****	2
SpringfieldUrbana	59, 183 10, 244	16	2		. 2				2	
Indiana:	10, 244	1	1				1			
Anderson	29, 767	5	1	1	1			1 -		
Crawfordsville	10, 139	0	1			*****	1	*****	1	*****
East Chicago.	35, 967	10	î					*****	*****	
Elwood	35, 967 10, 790	1			. 13					
Frankfort	11,585	2	1		. 1					
Gary. Hammond	55, 378	13	1	· i	. 1		3			
Huntington:	36, 004 14, 000	8 2		- 1						
Indianapolis	314, 194	67	31		1		4		4	
Kokomo	314, 194 30, C67	9	12		i		i			1
La Fayette	22, 486	7 7							1	
Logansport Michigan City	21,626	7	3							
Mishawaka	19, 457 15, 195	2 5	*****							
Muncie	26, 524	15	1	1	1		2		2	
Newcastle	14, 458		2			*****		*****	-	-
South Bend	70, 983	14	6				2		1	
Terre Haute	66,083	7	2				2			
Burlington	04 057	8								
Burlington. Cedar Rapids.	24, 057 45, 566	8	····i	*****			3			*****
Clinton	24 151	******	3				3			
Clinton	56, 727 126, 468 11, 267 15, 731		6		1		*****			*****
Des Moines	126, 468		6				4			
Iowa City	11,267						1			
Muscatine	16,731	5		*****			1			
Ottumwa.	16, 68 23, 003	9	1	*****			1			*****
Sioux City	71,227		3		18		4			*****
Waterloo	26, 230						4			*****
ansas:										
Atchison Coffeyville Fort Scott	12,630				13		2 .		4 .	
Fort Scott	13, 452 10, 693	3	*****			*****	1 .			
Kansas City	101 177	3	· · · · · ·	1	5				10	****
Lawrence	101,177 12,456	2			3		8 .		12	*****
Parsons	16, 028			******			1			
Topeka	50,022 72,217	7	2				î l		3 .	*****
Wichita	72, 217	24	1				2 .		3	1
entucky: Covington	** ***									
Henderson	12 160	12	1				1 -		1	1
Lexington	57, 121 12, 169 41, 534 234, 891	21	2		*****					2
Louisville	234, 891	70	8		1 .		1		6	5
Owensboro	17, 424		2				1 .			0
ouisiana:										
New Orleans	387, 219 .	******	11		3 .		5 .		18 .	
Auburn	16, 985	6			1					
Bangor	25, 978	0 .			1	*****	1			

	Popula-	Total deaths	Diph	theria.	Mes	sles.	Sea	rlet rer.		ber- osis.
City.	tion Jan. 1, 1920.	from all causes.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Maine—Continued.										
Biddeford	18,008	5			1		2			
Lewiston	31, 791 69, 272	9	4			*****	i			
Portland	10 691	13				*****				
Sanford (town)	10, 691 13, 351	0	1							
faryland:	10,001	*******	1							
Baltimore	733, 826	194	24	3	5		18		39	1
Cumberland	29, 837 11, 066	9		*****		*****			1	
Frederick	11,066	6	2				1	*****	1	
assachusetts:	10 007	2	1		1				1	
Adams (town)	12, 967 10, 036	1 1		*****						
Amesbury (town)	18, 665	2	3							
Attleboro	19, 731	ī								
Attleboro	10, 749	0								
Beverly	19, 731 10, 749 22, 561	5					1			
Boston	748, 060	200	46	4	9		35		45	1
Brockton	66, 254 37, 748 109, 694	9	4	*****	1		2	*****	1	
Brookline	37, 748	10	4		*****	*****	4		3	
Cambridge	43, 184	27 8		*****	*****		3		3	
Chicopee	36 214	3	1		*****					
Clinton.	36, 214 12, 979 11, 108	3					1			
Danvers	11, 108		1	1					3	
Dedham	10, 792	2								
Dedham	11, 261 40, 120				1					
Everett	40, 120	2					1		6	
Fall River	120, 485	18	4	*****			3 2		0	
Framingham	17, 033	1 1		*****	····i		î	*****	2	*****
Gardner	16, 971 15, 462	4 3	*****		1	*****		*****	ī	
Greenfield	53, 884	9	1	*****	1		3		2	
Holyoke.	60, 203	14	5						1	
Lawrence	94, 270 19, 744 112, 759	17	3	1					2	
Leominster	19, 744						1		3	
Lowell	112, 759	31	2				3	*****	2 2	
Lynn	99, 148	22	2				1		4	
Malden	49, 103 39, 038	14	2 5		1	*****		*****	i	
Medford	18, 204	9	9							
Melrose	15, 189	1			1					
New Redford	121, 217	30	2				2		5	
New Bedford Newburypert	121, 217 15, 618	8								
Newton North Adams	46 054	9	2							
North Adams	22, 282 21, 951 10, 174	9	3		3					
Northampton	21, 951	8					1		1	
Northbridge	10, 174	1					····i	*****		
PeabodyPittsfield	19, 552	12	1 2	2	6				2	
Plymouth	41, 763 13, 045	12	1 -							
Quincy	47, 876	10	2		1		1		2	
Salem	47, 876 42, 529	1	4	1			5		1	
Somerville	93, 091	19	3		2	1	4		3	
Southbridge	14, 245 129, 614	2	*****		6		1		2	
Springfield		34	4	2	1		1		2	1
Taunton	37, 137	9	*****		13		3		*****	
Watertown	21, 457 18, 604	6	*****		10		1		1	
Winchester	10, 485	9	1				i			
Winthrop	15, 455	i								
Woburn	16, 574 179, 754	3								
Worcester	179, 754	26	21	2			10			
jehigan:										
Ann Arbor	19,516 36,164	8	1							
Battle Creek.	36, 164	1	*****	*****			8		3 2	-
Benton Harbor	12, 233	235	32	2	12	2	30	******	33	1
Detroit	993,678		32	2	12	- 4	6		5	
Grand Rapids	137,634	21	2	*****		*****	0			
	40,010				1		1		1	
Highland Park	46 490	5	3							
Highland Park	48,615 46,499 12,183	5	4				4			

*	Popula-	Total deaths	Dipt	theria	Mea	isles.		arlet ver.		ber- osis.
City.	tion Jan. 1, 1920.	from all causes.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Michigan—Continued.										
Marquette	12,718	4	1		38					
Muskegon	36,570 34,273	8	4		1		8			
Port Huron	25, 944	11	8	*****	i		2			*****
Port Huron	12,096	4			3		i		1	*****
Minnesota:	12,000	,	*****		0					
Duluth	98, 917	12	7		1		9		6	
Hibbing	15,089	4					7			1
Minneapolis	390,582	74	28	2		1	33		8	3
Rochester	13,722	111	1		1					1
Rochester St. Cloud St. Paul Virginia	15, 873		1				4			
St. Paul	234,698 14,022	41	24	1	9		14		6	1
Virginia	14,022		1				3			
Winona	19, 143	2	*****	*****	*****		*****		*****	*****
Missouri: Cape Girardeau	10.252	4	7				1			
Independence	11,686	1	2		*****		4	*****		
Implemence	29, 902	*******	1	*****			3		*****	
Kansas City	324,410	66	11		1		17		5	3
St. Joseph	77, 939	20	i		î		2			
Joplin. Kansas City. St. Joseph. Rt. Louis.	77, 939 772, 897	171	36	1	1		31	1	38	12
montana.										
Anaconda	11,668	0			75					
Billings	15, 100	2			3					
Great Falls	24, 121 12, 037 12, 668	4	4		2				1	
Helena Missoula	12,037	6	10		*****				*****	*****
Missoula	12,668	10		*****						
Nebraska:	F4 040	9					9		1	
Lincoln	54,948		18	4	5		5			******
Omaha	191,601	45	18	,	3		9		*****	3
Nevada:	12,016	2					2			
Reno		"					-			
Concord	22, 167 13, 029 11, 210 28, 379	5			8		1			1
Dover	13,029	5								
Keene	11,210	4			43		1			
Nashua	28,379	9								1
Now Iorsov										
Asbury Park	12,400 50,707	4								
Atlantic City	50,707	11	1			*****			3	
Bayonne	76, 754		2		····i		2		1	
Bloomfield	22,019	0	4		1	*****	2		2	
Clifton	26 470	33	6	*****					2	i
Elizabeth	116,309 26,470 95,783 19,381		4	1	····i			*****	3	
Garfield	19, 381	5				******			\$	
Hoboken	68, 166	12	1						7	
Jersey City	298, 103		4		3		1		11	
Kearny. Long Branch	26, 724 13, 521	6	2							
Long Branch	13, 521	5								1
Montelair	96 610	2							1	
Morristown	12,548 414,524 33,268	2			3					*****
Newark	414, 524	88	7			*****	4		20	8
Orange	33, 268	16	1	*****			2		1	*****
Passaic	63, 841 135, 875	10	6	*****	2	*****	2	*****	7	*****
Paterson	41 707	6		*****	-		-		2	1
Perth Amboy	41,707 16,923 27,700	4			*****			*****		
Plainfield	27, 700	3		*****	37					
Summit	10, 174	2								
Trenton	119, 289	29	1		2	*****	2		7	4
West Hoboken	40,074 29,926	4	1							
West New York West Orange	29,926	1	1							
West Orange	15, 573	1							3	
New Mexico:		_								
Albuquerque	15, 157	5	1				1	*****	6	3
New York:	112 244						16		6	
Albany	113,344	3	5		2	*****	16	*****	0	*****
Amsterdam	33,524		11	· · · · i	2		11		11	8
Buffalo	506,775 22,987	105	11		4	*****	1		1.1	

	Popula-	Total	Diph	theria.	Mea	sles.	Sea	rlet er.		ber- osis.
City.	tion Jan. 1, 1920.	from all causes.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
New York—Continued.										
Elmira	45, 393	12								
Geneva	14.648	4 2								
Glens Falls	16,638	2	*****				1			
Hornell	15, 025 11, 745 17, 004	1	1							
Ithaca	17,004	7	î		2				2	
Jamestown	38, 917	11			1		3			1
Lackawanna	17, 918 13, 029	4	3		1					
Little Falls	13, 029	2								
Lockport	21,308	6			8		2			
Middletown	18, 420 42, 726 5, 620, 048						*****		1	
Mount Vernon New York	42,720	1,125	121	6	38	i	26	1	1 226	
New York	30, 366	10	1	0	1		20			1
Newburgh Niagara Falls	50, 760	111	1				5		1	
North Tonawanda	15, 482	1					1			
Olean	20, 506	6					1		1	
Peekskill. Poughkeepsie	15, 868	9								
Poughkeepsie	35,000	4	3						29	
Rochester	35, 000 295, 750 26, 341	44	3						29	
Rome	26, 341	7			2	*****	*****	*****		***
Saratoga Springs Schenectady	13, 181 88, 723 171, 717 72, 013	17	3 8	1	17	*****			1	****
Syracuse	171 717	28	11		20	*****	4		2	
Troy	72,013	20			9				4	
Watertown	31, 285	16			3					
White Plains	21,031	6								
Yonkers	21, 031 100, 176	15	7				4			
orth Carolina:			-	_						
Durham	21,719 43,525 24,418 12,742	6	3						*****	
Greensboro	43,525	10	6		1		3	*****		
Raleigh	24, 418	10	11	····i			9	*****		****
Salisbury	12, 142	1	*****					******		***
Wilmington	33 372	10	1	******			1			
Winston-Salem	13, 884 33, 372 48, 395	14	6		2		3		3	
orth Dakota:		-								
Fargo	21,961	4								
Grand Forks	14,010						6			
hio	000 488	00			1					
Akron	208, 435	32	10	····i		*****	5		*****	
Ashtabula	22, 082 18, 811	3	2				2	******	3	
Bueyrus	10, 425	1	-				1			
Cambridge	12 104	4	3				1			
Chillicothe	15, 831	3	3							
Cincinnati	15, 831 401, 247 706, 841 15, 236	102	9		2		14	2	13	
Cleveland	796, 841	126	41	3	1		28	*****	32	
Cleveland Eeights	15, 236	63	25	1	1	*****	4		5	****
	237, 031 152, 559 27, 292	27	9		*****		9		1	
Dayton	97 202	4			*****					
East Youngstown	11.237	4				1				
Findlay	17, 021 12, 468	5								
Fremont		1	1							
Hamilton	39, 675	12								
Lancaster	14, 706	7		*****			1	····i		****
Lima	41, 326 37, 295	10	8	*****	*****	*****	2	1	1	****
Lorain	27, 824	5	1		*****		ī		3	****
Martins Ferry	11,634	4								
Middletown	23, 594	4	1							
New Philadelphia	10,718						1		*****	
Newark	26, 718	3	6				2			
Niles	13,080	2 7	1	*****						
Piqua	15, 044 10, 305	1		*****	*****		1	*****	1	
Salem	10, 305 22, 897	5 3	1	*****	*****	*****			1	****
Sandusky Springfield	60, 840	11	1							
Steubenville	28, 508	8	3		*****				1	
Toledo	243, 164	55	24	5	3		15	1		
Zanesville.	29, 569	11	-1	-	-					

Pulmonary only.

•	Popula-	Total deaths	Diph	theria.	Med	sles.		arlet ver.	Tu	ber- osis.
City.	tion Jan. 1, 1920.	from all causes.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Oklahoma: Oklahoma Tulsa	91, 295 72, 075	22	2				4			1
Oregon: Portland Pennsylvania:	258, 288	50	17		34		5		3	2
Allentown	73, 502		2		1	1	1		1	
Altoona	60, 331		2				1			
Berwick	12, 181 50, 358		1							
BethlehemBraddock	20, 879		5						1	
Butler	23, 778		2				4			
Canonsburg Carnegie Chester Coatesville	10, 632 11, 516		3							
Carnegie	11, 516 58, 030	******					2			
Coatesville	14, 515	*******					1		0	
Connellsville Donora	14, 515 13, 804 14, 131		1				4			
Donora	14, 131		1				1			
Duquesne Easton	19,011 33,813		1				2			*****
Erie.	93, 372	*******	3		6	******	11		9	
Farrell	93, 372 15, 586		18				1		1	
Greensburg	15 033		5				2			
Harrisburg	75, 917 32, 277 20, 452		3				1		*****	
Hazelton	20, 452		6							
Jeannette	10.627		7							
Johnstown	67, 327 53, 150		7				3	*****		
Lancaster	16, 713		5				1	*****		
Mc Keesport	46, 781		3				i			
	18, 179 44, 938 32, 319		3							
New Castle	44, 938		4							
Norristown	32, 319		2					*****		
Oil City	14, 928	*******	1		*****	*****	2	*****	*****	
New Castle Norristown North Braddock Oil City Philadelphia Pittsburgh	21, 274 21, 274 1, 823, 779 588, 343 16, 500 107, 784 137, 783 21, 747	376	48	****	3	*****	15		80	23
Pittsburgh	588, 343	147	30	· · · · i	4		27	3	16	9
Plymouth	16, 500		2				2			
Reading	107, 784		1		····i				····i	
Seranton	21 747	******	i		1		1			
Sharon. Shenandoah			2							
Steelton	13, 428 15, 721		4				6			
Sunbury	15, 721				1		1			
Swissvale Tamaqua	10, 908 12, 363		4		6		3	*****		
Uniontown	15, 692	*******	2							
Warren	15, 692 14, 272						3			
Washington	21 480				2					
Wilkes-Barre	73, 833 24, 403 36, 198		4			*****	1 2	*****	1	
Williamsport	36, 198	********			- 21		ĩ			
YorkRhode Island:	47, 512				1		2		3	
Rhode Island:	00.10									
Cranston Cumberland (town) Newport Pawtucket	29, 407 10, 077	0				*****	····i			
Newport	30, 255	8				*****			******	3
Pawtucket	30, 255 64, 248 237, 595	12					1			1 5
Providence	237, 595	46	6	1	1		4	1		5
South Carolina: Charleston		22	2	1	2		1			3
Columbia	67, 957 37, 524	22	2		1					2
Greenville	37, 524 23, 127	22	1		2					1
South Dakota:										
Sioux Falls	25, 202	2								*****
rennessee: Chattanooga	57, 895	2	5	2						
Knoxville	77, 818		2				2			
Memphis	77, 818 162, 351 118, 342	68	4		1		3		8	2
Nashville	118, 342	35	1				4		6	3
Texas:	40, 422	8	2	1						
Beaumont	10, 522	3								

	Popula-	Total deaths	Diph	theria.	Mea	sles.		erlet ver.		ber- osis.
City.	tion Jan. 1, 1920.	from all causes.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Texas—Continued.										
Dallas	158, 976	32			17		4			1
Fort Worth	106, 482	14	8	1	1				4	
Galveston	44, 255	11					1			
Houston	138, 276	27	1							
San Angelo	10,050	12								
San Antonio	161, 379	42	6						3	1
Waco	38, 500	8						1		
Utah:	,	1								
Provo	10, 303	3								
Salt Lake City	118, 110	17			3		3	1		
Vermont:	*****	1			-	*****	-		*****	
Burlington	22,779	10		1			3			
Virginia:	,	1							*****	
Alexandria	18,060	3						1		
Charlottesville	10,688	4					2			
Lynchburg	30, 070	10	7	1			2			
Norfolk.	115,777	10	3		2	*****	ĩ	*****	4	
Petersburg	31,012	6	0	*****	-		3		i	
Postsmouth	54, 387	14	1	*****	*****		1	*****		
Portsmouth Richmond	171,667	46	12	1	2		5	*****	3	
	111,001	40	12	1	1 -		0		0	,
Washington:	25, 585		3		2			1		
Bellingham			0	*****		*****		*****		*****
Everett	27,614		3	*****	1	*****	******		******	
Seattle	315, 312			*****	1		11		12	
Tacoma	93, 965	*******	2		*****	*****	4		*****	*****
Walla Walla	15, 503	*******	*****	*****	*****	*****	2	*****		
Yakima	18, 539	*******	*****		6	*****	2			*****
West Virginia:			-							
Bluefield	15, 282	6	7				2	*****		
Charleston	39,608	14	7						1	
Clarksburg	27,869	5	4				1			
Fairmont	17,851		1				1		*****	
Huntington	50, 177	25	2				5	1		
Martinsburg	12, 515		2				4		*****	
Morgantown	12, 127		3				1		3	
Parkersburg	20,050	4					1			
Wheeling	56,208	11	2				8		3	
Wisconsin:										
Appleton	19, 561	3	1							
Beloit	21, 284	2					7		2	-
Fond du Lac	23, 427	4								
Green Bay	31,017		13		6		7			
Janesville	18, 293	2			1		2			75
Kenosha	40, 472	3	1		1		1			
Madison	38, 378	10	7		1		1		2	
Manitowoc	17,563		1							
Marinette	13,610		2							
Milwaukee	457, 147		40	3	3		17		11	
Oshkosh	33, 162	3			2				1	
Racine	58, 593	8	2		ī		4			
Sheboygan	30, 955	6	9	1		*****	i	1		
Superior	39,671	3	1				î	-		
Waukesha	12,558	9	5			*****			*****	
Wausau	18,661	*******	3	*****	3	*****	1		*****	*****
West Allis	13,745		0	*****	0				5	
TT COL ALIED	10,110					*****		*****	· ·	

FOREIGN AND INSULAR.

CANADA.

Scarlet Fever-Cochrane, Ontario.

During the week ended October 6, 1923, an epidemic of scarlet fever, with a total of 14 cases, was unofficially reported in the town of Cochrane, Ontario, Canada.

GERMANY.

Vital Statistics-Bremen-August 1-31, 1923.

During the month of August, 1923, 404 births (not including 11 stillbirths) and 215 deaths were reported in Bremen, Germany, population (estimated) 280,000. The ratio of stillbirths to live births was 1:45 for legitimate and 1:13 for illegitimate births. Among the causes of death were the following: Gastroenteritis (under 1 year), 3; measles (and German measles), 4; influenza, 3; pneumonia, 18; tuberculosis, 34; whooping cough, 2.

HAWAII.

Plague-Honokaa.

One fatal case of pneumonic plague was reported at Honokaa, Hawaii, September 21, 1923, in the same locality in which several plague-infected rodents have recently been found.

INDO-CHINA.

Cholera-Plague-Smallpox-February, 1923.

During the month of February, 1923, cholera, plague, and smallpox were reported in Indo-China as follows:

Disease.	Februa	ary, 1923.	February, 1922.	
Disease.	Cases.	Deaths.	Cases.	Deaths.
Cholera. Plague Smallpox	11 127 236	7 121 73	153 112 85	128 85 19

¹ For distribution according to Provinces, see pp. 2501, 2502.

Dysentery-Influenza-Leprosy.

During the month of February, 1923, 161 cases of dysentery (native); 19 cases, with 39 deaths, of influenza (native); and 3 cases of leprosy (native) were reported in Indo-China.

JAMAICA.

Smallpox (Reported as Alastrim).

During the week ended September 29, 1923, 69 new cases of small-pox (alastrim) were reported in the island of Jamaica. None was reported for the parish of Kingston.

Typhoid Fever-Kingston and Vicinity.

During the same period there were reported at Kingston 7 cases of typhoid fever, and in the surrounding country 6 cases.

MEXICO.

Malaria-Manzanillo.

During the week ended October 9, 1923, 3 deaths from malaria were reported at Manzanillo, Mexico.

MOROCCO.

Plague-Melilla.

During the period August 31-September 6, 1923, 4 cases of bubonic plague were reported in the camp of Dar-Quebdani, zone of Melilla, in the northeastern part of Spanish Morocco. The cases occurred in soldiers of the garrison and in a trader in the locality.

POLAND.

Communicable Diseases-July 29-August 4, 1923.

During the week ended August 4, 1923, communicable diseases were reported in Poland as follows:

Disease.	Cases.	Deaths.	Districts with greatest num- ber of deaths.
Cerebrospinal meningitis	7 47 121 159	4 3 12 21	Former Russian Poland. Do. Lodz City. Tarnopol.
Smallpox. Tuberculosis. Typhoid fever. Typhus fever	139 200 50	150 18 9	Warsaw CityLodzLublin and Warsaw.
Typhus fever (recurrent)	12 73	6	Stanislawow.

Dysentery-Malaria.

During the same period 215 cases of dysentery, with 14 deaths, and 149 cases of malaria were reported in Poland.

The reports contained in the following tables must not be considered as complete or final as regards either the list of countries included or the figures for the particular countries for which reports are given.

Reports Received During Week Ended October 26, 1923.1

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
China:				
Foochow	Aug. 26-Sept. 1			Present.
Shanghai	Sept. 3-16		12	Natives.
India:	C 0 15			
Bombay	Sept. 9-15	1	*********	
Calcutta	Sept. 2-8	10	10	
Indo-China: Province—				
Annam	Feb. 1-28			Epidemic.
Cochin China	do	11	7	Epideinic.
Siam:		**		
Bangkok	Aug. 26-Sept. 1	1	1	

PLAGUE.

Brazil: Bahia	ept. 2-8	2	,	2
China:	pt. 2-0	-		-
	ept. 2-15		5	
	ug. 26-Sept. 1			Endemic.
Hongkong.	do	3		Zindellier
Ceylon:		-		
	ept. 2-8	7	2	
Hawaii:				
Honokaa Se	pt. 21	1	1	
India:				
Bombay Se	ept. 9-15	13	10	
Karachi	do	7	10	
Madras Presidency Se	pt. 2-15	857	543	
Rangoon Se	pt. 2-8	23	20	
Indo-China:				
Province—				
Annam Fe	eb. 1-28	27	21	
Cambodge		99	99	
Cochin China	do	1	1	
Morocco:				
Melilla				Aug. 31-Sept. 6, 1923: Cases, 4.
				In garrison of Dar-Quebdani.
Siam:				
	ug. 19-25	1	1	
Straits Settlements:				
	ng. 26-Sept. 1	1	1	
Syria:			1	
	pt. 1-10	1		
Turkey:				
Constantinople Se	pt. 16-22		1	

SMALLPOX.

Arabia:				
Aden	Sept. 16-22	1		
Austria:	•			
Vienna	July 29-Aug. 4	1		
Brazil:				
Bahia	Sept. 2-8	3		
	Sept. 9-22	4	1	
China:				
	Sept. 2-15			Present.
Chungking	Aug. 26-Sept. 8			Endemic,
Foochow	do			Present.
	Aug. 27-Sept. 2	3		
Hongkong	Aug. 26-Sept. 1	4	3	
Egypt:				
Cairo	June 25-July 1	1	1	
Great Britain:				
Nottingham	Sept. 9-22	. 2		

¹ From medical officers of the Public Health Service, American consuls, and other sources.

Reports Received During Week Ended October 26, 1923 - Continued.

SMALLPOX-Continued.

Place.	Date.	Cases	Deaths.	Remarks.
India:				
Bombay	Sept. 9-15	3 2	1	
Calcutta	Sept. 2-8	2	1	
Madras	Sept. 2-15	15	2	
Rangoon	do	1	1	
Indo-China:			-	
Province-			1	
Annam	Feb. 1-28	7		
Cambodge		31	11	
Cochin China		138	49	
Laos		100	10	A few cases.
Tonkin.		60	13	A lew cases.
		00	10	Sept 22 20 1022; Cases 60
Jamaica Mexico:		*******	********	Sept. 23-29, 1923: Cases, 69.
	Sant 0 15	10		Including municipalities in Pas
Mexico City	Sept. 2-15	10	********	Including municipalities in Fed
Poland	T-1 00 1 1			eral District.
	July 29-Aug. 4	4	********	
Siam:	1 10 0 1	0.4	_	
Bangkok	Aug. 19-Sept. 1	94	57	
Spain:	0 4 00 00			
Valencia	Sept. 23-29	5	1	
Switzerland:				
Berne	Sept. 16-22	2		
Turkey:	1			
Constantinople	do	1		

TYPHUS FEVER.

China				Sept. 30-Oct. 6, 1923: Deaths, 2.
Chungking	Aug. 26-Sept. 8			Endemic.
Harbin	Aug. 27-Sept. 2	2	********	
Egypt:		-		
Alexandria	Sept. 10-16	5		
Cairo	June 25-July 1	- 5	3	
Germany:		-		
Coblenz	Sept. 16-22	2	********	
Stuttgart	Sept. 2-8	1		
Italy:	04 04 20	10		
Turin	Sept. 24-30	10	1	
Mexico:	Sept. 2-8	16		Including municipalities in East
Mexico City	Sept. 2-5	10	********	Including municipalities in Fed- eral districts.
Poland	July 29-Aug. 4	50	9	July 29-Aug. 4, 1923: Recurrent
r orang	July 20-24ug. 4	00		typhus; cases, 12.
Switzerland:				ty paris, cases, 12.
Zurich				Sept. 16-22, 1923; Paratyphus
2000 1000 1000 1000 1000 1000 1000 1000				fever, 5 cases.
Turkey:				10.01, cabos.
Constantinople	Sept. 2-22	3	2	•

YELLOW FEVER.

	-		1	
Brazil: Babia	Sept. 2-8	2	1	

Reports Received from June 30 to October 19, 1923.1

CHOLERA.

. Place.	Date.	Cases.	Deaths.	Remarks.
China: Canton. Foochow. Shanghai. Do.	Aug. 26-Sept. 1 July 29-Aug. 25 Aug. 20-Sept. 2 Aug. 28.	1 2	28	Present. Cases, foreign; deaths, native. Reported moderately prevalent.

¹ From medical officers of the Public Health Service, American consuls, and other sources.

Reports Received from June 30 to October 19, 1923-Continued.

CHOLERA-Continued.

Place	Date.	Cases.	Deaths.	Remarks.
India				Apr. 15-June 30, 1923: Cases, 19,470; deaths, 14,608. July 1-Aug. 4, 1923: Cases, 7,800
Bombay	June 3–30 July 1–Sept. 8	34 128	23 75	deaths, 4,200. Aug. 5-Sept. 1, 1923: Cases, 41;
Calcutta	May 6-June 30	371	300	deaths, 23.
Do Madras	July 8-Sept. 1 June 3-30	183	137	
Do	July 1-Sept. 1	15	6	
Rangoon	May 13-June 30	18	15	
Do Indo-China	July 1-Aug. 25	34	31	Oct. 1-31, 1922: Cases, 92; deaths,
	••••			53. Preceding month: Cases, 24; deaths, 14. October, 1921: Cases, 100; deaths, 61. Nov. 1-Dec. 31, 1922: Cases, 161; deaths, 59 (native); European, 1 case.
City— Saigon	May 20-June 30	12	11	Including 100 square kilometers
Do	July 1-28	13	12	of surrounding country.
Province-				
Annam	Sept. 1-Dec. 31	179 47	66 27	
Cambodge	do	51	33	
Do	Jan. 1-31	8	1	
Tonkin	Oct. 1-Dec. 31	1		
Iraq (Mesopotamia):				
Bassorah	Aug. 6–18	166	74	Aug. 21, 1823; Present. Port de- clared infected since Aug. 6, 1923.
Philippine Islands:				
City— Manila	June 10-16	2	1	Death in foreign case from Ching-
Province— Bulacan	May 17-23	1		kang, China.
Capiz	May 27-June 2	î	1	
Cebu	Apr. 8-21	1	î	
Cctobato	Apr. 8-14	1	1	
Laguna	May 6-June 9	2 2	1	
Mindoro	Aug. 5-11	2	2	
Mountain	Mar. 25-31	1	1	
Occidental Negros	July 22–28	2	2	
Pangasinan Russia (Soviet)	June 21-30	-	-	Jan. 1-May 15, 1923: Cases 10.
Siam:	****************			The state of the s
Bangkok	May 13-June 30	10	11	
Do	July 1-21	4	2	

PLAGUÉ.

Algeria: Aug. 11-20	2	1	Actual dates of occurrence, Aug. 16 and 17, 1923.
St. Eugène Aug. 1-20	2	2	Locality 5 miles north of Algiers.
Australia: Sydney	1	1	
Azores; St. Michael Island	12	5	In one locality.
Brazil:	1.		
Porto Alegre			Jan. 1-Mar. 31, 1923: Deaths, 19.
Kenva			
Kisumu June 10-16 Aug. 5-11	2	1	
Tanganyika May 6-June 2	3	3	Territory.
Uganda July 5-21	20	12 5	
Canary Islands:			
Las Palmas June 7	1		

Reports Received from June 30 to October 19, 1923-Continued.

PLAGUE—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Ceylon:	May 6-June 30	18	19	Plague rats, 38.
Do	July 1-Sept. 1		40	Plague rats, 19. One plague-in- fected cat.
China:	May 13-June 25		10	
Do	July 1-Sept. 1		10	
Foochow	May 27-June 23		*******	Present.
Do	July 8-Aug. 25 Apr. 29-June 30	63	40	Reported as endemic.
Hongkong	July 1-Aug. 4	27	32	
Manchuria— Yakoshih	May 31	1	1	Station on Eastern Chinese Rail- way. Occurring in tarabagan (marmot) hunter. Bubonic.
Nanking	June 17-30 July 1-Aug. 4			Rodent plague present. Do.
Do Ecuador:	July 1-Aug. 4		********	*
Guamote	Aug. 1-15	9	2	Country district. May 16-June 30, 1923: Rats ex-
Guayaquil		9	2	amined, 13,800; found infected,
Santa Ana (Manabi)	July 16-Aug. 15	7	3	39. July 1-Aug. 31, 1923: Rats examined, 32,960; found in-
Egypt				Jan. 1-June 21, 1923: Cases, 1,051;
				Jan. 1-June 21, 1923: Cases, 1,051; deaths, 548. May 1-29: Cases, 345. Jan. 1-June 24, 1923: Cases, 1,060. Jan. 1-Aug. 23, 1923: Cases, 1,319: deaths, 643. July 23-29, 1923: Cases, 47. May 1-29, 1923: Cases, 14.
City—	Jan. 7-June 24	35	15	May 1-29, 1923: Cases, 47.
Alexandria	July 1-Aug. 20		2	may 1 20, 1020. Casco, 11.
Port Said	Jan. 7-June 24	24	12	May 1-29, 1923: Cases, 13.
Do	July 1-Sept. 9	24	37	May 1-29, 1923: Cases, 3.
SuezDo		12 7	i	may 1-20, 1023. Cases, 5.
Province— Assiout Benisouef	May 1-29	64		Deaths not reported.
Benisouef	do	.7		Do.
Fayoum Garhieh Geizeh	do	14		Do. Do.
Geizeh	do	3		Do.
Girgeh		123		Do.
Konoh		22 34		Do. Do.
Menoufieh	do	46		Do.
Hawaii:				
Hamakua				Plague-infected rats: Pohakea, May 23, 1923, 1 rat: vicinity of
	3 1			Pacific Sugar Co. mill. June 2, 1 rat; Aug. 2, 1 rat at Hamakua Mill Co. plantation. Aug. 16, plague rat found at Kapulena.
Honokaa				July 20, 1923: One plague rat; July 30, 2 plague rats; Honokaa Sugar Co. mill and Honokaa village
India				Apr. 29-June 23, 1923: Cases, 5,783; deaths, 4,481. July 1-14, 1923: Cases, 2,400: deaths, 1,650.
Bombay	Apr. 29-June 30	503 21	411	5,783; deaths, 4,481. July 1-14,
Calcutta	July 1-Sept. 8 May 6-June 9	13	13	July 29-Aug. 4, 1923: Cases, 1,244: deaths, 710.
Do	Aug. 12-18 May 13-June 30 July 1-Sept. 8 May 13-June 30	110	1 85	1,244: deaths, 710. Plague rats, 5.
Karachi Do	July 1-Sept. 8	84	71	inguo tato, o.
Madras Presidency	May 13-June 30	254	141	
Do	July 1-Sept. 1 May 6-June 30	1,001	970	
Rangoon	May 6-June 30	260 266	229 232	
DoIndo-China	July 1-Sept. 1	200		Oct. 1-Dec. 31, 1922: Cases, 245;
				deaths, 237. Sept. 1-30, 1922:
City— Saigon	June 24-30	5	5	Oct. 1-Dec. 31, 1922: Cases, 245; deaths, 237. Sept. 1-30, 1922: 70 cases; 68 deaths. Including 100 square kilometers of surrounding country.
Do	July 1-7	1	1	Do.

Reports Received from June 30 to October 19, 1923-Continued.

PLAGUE—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Indo-China—Continued.				
Province—	0-1 1 D 01	40	- 00	P
Annam	Oct. 1-Dec. 31	40	36	Preceding month, 15 deaths.
Do	Jan. 1-31 Oct. 1-Dec. 31	20 145	18 145	Preceding month, 51 deaths.
Cambodge Do	Jan. 1-31	53	53	Freceding month, 51 deaths.
Cochin China	Oct. 1-Dec. 31	4	1	Preceding month, 4 cases, 2
Do	Jan. 1-31	2	2	deaths.
Iraq (Mesopotamia): Bagdad			224	- Course
Java				May 1-June 30, 1923: Deaths, 912.
Province-				July 1-31, 1923: Deaths, 469.
Djokjakarta	June 1-30		5	
Do	July 1-31		2	
Kedoe	June 1-30 July 1-31 June 1-30		135	
Do	July 1-31		122 48	
Pekalongan	June 1-30	******	66	
Do	July 1-31	*******	143	
Samarang	June 1-30 July 1-31	******	115	
Soerabaya	June 1-30		113	
Soerakarta	do		109	May 16, 1923: Epidemic in 5 dis-
Do	July 1-31		164	tricts.
Madagascar				Apr. 1-June 15, 1923: Cases, 74;
Province—				Apr. 1-June 15, 1923: Cases, 74; deaths, 71. Bubonic, pneu- monic, septicemic.
Tananarive	Apr. 1-June 30	57	54	July 16-31, 1923: Cases, 3; deaths,
Tananarive	Apr. 16-June 30	21	21	3. Pneumonic and septicemic.
Do	July 1-31	2	1	1 pneumonic.
Mauritius Island				May 4-21, 1923: 2 cases.
Port Louis	May 4	1		
Mexico: Tampico				Apr. 15-21, 1923: 1 plague rat.
Tampi			********	Aug. 8, 1923: At Dona Cecella, a suburb of Tampico, 1 plague- infected rat found. From Jan. 1 to Aug. 8, 1923, plague-
Palestine:				infected rats found, 5.
Jaffa	June 19-July 16	10	1	Bubonic and septicemic.
Peru			*******	May 1-June 30, 1923: Cases, 111; deaths, 68. July 1-Aug. 31,
Locality—	M. 10 T. 00			deaths, 68. July 1-Aug. 31,
Ayabaca	May 16-June 30		13	1923: Cases, 31; deaths, 16.
Do		4 5	3	
Do	July 1-Aug. 31	2	1	
Canete	May 16-June 30	3	2	
Do	July 1-31	6	3	
Do Cerro Azul	July 1-31 May 1-31 May 1-June 30	3	1	
Chiclayo	May 1-June 30	9	2	
Dő	July 1-Aug. 31	6	4	
Cutervo	May 1-15	2	1	
Huancabamba	May 1-June 30	, 34	25	
Huacho	July 1-31	1		
Huaral	June 1-30	2	2	
Do	July 1-31	3	1	
Lima (city)	May 1-31 July 1-Aug. 31	17	8	
Do	Mary 1-Aug. 31	6 7	3	
Lima (country)	May 1-31 July 1-Aug. 31	2	4	
Mollendo	June 1-30	ī	i	
Rogno	Ang 1_21	î	î	
Salaverry	May 1-June 30	11	3	
Trujillo	do	2	3	
				Jan. 1-May 15, 1923: Few cases in Far East regions.
Senegal:				
Dakar	July 1-31	4	4	Reported to have come from port of Rufisque, Senegal.
Rufisque	Aug. 6			Present.
	Ann 00 Term - 20	31	20	
Bangkok	Apr. 29-June 30	31 1	30	

Reports Received from June 30 to October 19, 1923-Continued.

PLAGUE-Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
HaramhorStation No. 83	May 6	1	1	Sporadic cases of plague reported yearly in localities vicinity of stations Matsievskaya and Bor- zia, Transbaikal Railway. Village in zone of endemic tara- bagan (marmot) plague, Trans- baikal region. Station on Transbaikal Railway. Marmot plague during recent years.
Soktii. Straits Settlements: Singapore. Do. Syria: Beirut. Do. Turkey: Constantinople.	May 6-June 30 July 22-Aug. 25 May 12-June 20 July 1-Aug. 31 Aug. 19-25	6 2 3 5	8 2 1 1	On Aug. 16, 1923: Two cases reported.

SMALLPOX.

			1	
Algeria:				
Algiers	May 1-31	2		
Do	Aug. 1-10	1		July 1-31, 1923: Cases, 2,
Arabia:				
Aden	May 27-June 2		. 2	
Do	July 8-Aug. 11	7	1	
Azores:	outy o mug			
St. Michael Island	July 15-21	7		Mild.
Bolivia:	July 10-21			atid.
La Paz	Apr. 1-June 30	2	3	
	Apr. 1-3 title 30	-	0	
Brazil:	A 10 0*	1		
Bahia	Aug. 19-25		********	
Pernambuco	May 6-June 16	5	********	
Do	July 1-Sept. 1	46	4	
Rio de Janeiro	May 13-June 23	25	3	
Do	July 15-Sept. 8	32	9	
Rio Grande do Sul	*******		*******	Jan. 1-Mar. 31, 1923: Present with
				some mortality.
British East Africa:			1	
Kenya-				
Mombasa	May 20-26	1		From vessel from Bombay.
Tanganyika	Apr. 29-Jnne 9	3		Territory.
Do	July 1-28	27	6	Do.
Uganda—				
Entebe	Apr. 1-30	4		
Zanzibar				July 1-31, 1923: Cases, 7: deaths, 3,
Canada:				,,, -, -,, -,
Alberta-			-	
Calgary	May 27-June 2	1		Infection from Deer Lodge, Mont.
British Columbia-	may 21-June 2			Intection from Decr Boage, Mone
Vancouver	May 27-June 30	33	1	
	July 1-Sept. 15	15	1	
Do	Aug. 5-25	2		
Victoria	Aug. 0-20	2	********	
Manitoln-	T 2 20			
Winnipeg	June 3-30	1	*******	
Do	July 1-31	1		
New Brunswick—				
Kent County	July 1-7	1		
Ontario				June 1-30, 1923: Cases, 13. July
London	July 15-21	1		1-Sept. 30, 1923: Cases, 48.
Toronto	June 24-30	3		
Do	July 15-21	1		
Quebec-				
Quebec	June 10-16	1		Varioloid.
Saskatchewan-				
Moose Jaw	July 8-14	1		
Regina	June 24-30	3		
Cevion:	June 44 - 00	0		
Colombo	May 6-June 2	23		
Co	may o sume a	-0		

Reports Received from June 30 to October 19, 1923-Continued.

SMALLPOX-Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Chile:				
Concepcion	May 22-June 11		3	June 1-30, 1923: Cases, 2. July
Do	Sept. 1-10	1	1	1-31, 1923: 1 death.
Talcahuano Valparaiso	Aug. 12-18 May 7-June 23	6	121	June 10-16, 1923: 29 cases reported
v dipataso	may round so			from 2 districts.
Do	July 1-28	12	10	July 30, 1923: 25 cases in lazaretto. Aug. 6: 20 cases. Aug. 14: 60 cases present.
China:				•
Amoy	May 13-June 23 July 1-Sept. 1 May 14-20		3	June 19-25, 1923: Present.
Do	July 1-Sept. 1			Present.
Antung	May 14-20			June 1-30, 1923: Present. July
Canton	***************************************			June 1-30, 1923: Present. July 1-31, 1923: Present.
Chungking	May 13-June 30			Present and endemic.
Do	July 1-Aug. 25			Do,
Foochow	May 13-Aug. 25 Apr. 29-June 30	98		Present.
Hongkong	Apr. 29-June 30	98		
Do	July 1-Aug. 25	51	46	
Manchuria— Dairen	May 91 97	1		2
Harbin	May 21-27	5	*******	
Do	July 1-22	3		
Mukden	May 13-20:	1		
Nanking	May 13-June 23			Do.
Do	June 24-Sept. 1			Do.
Shanghai	June 24-Sept. 1 May 21-June 3 July 2-Aug. 26	4		Foreign.
Do	July 2-Aug. 26	1	4	Case, foreign: deaths, Chinese.
Chosen (Korea): Chemulpo	May 1-31	1		
Fusan	May 1-June 30	4		
Do	May 1-June 30 July 1-31	22	6	
Gensan	May 1-31 May 1-June 30	1		
Seoul	May 1-June 30	42	13	
Do	July 1-31	6	7	
Cuba:				
Antilla	July 8-14		2	From Preston.
Czechoslovakia				JanMar. 1923: Cases, 15. Apr
Province-				June, 1923: Cases, 16; deaths, 4.
Bohemia	Jan. 1-Mar. 31	15	4	
Ecuador:	* 1			
Alausi	July 16-31	3		
Esmeral las	Aug. 16–31	2		
Guayaquil Montecristi (Manabi)	do			Present.
Riobama	do	1	1	11 Courts
Rocafuerte	do			Do.
Zaruma (El Oro)	do			Do.
Egypt:			_	
Cairo		23	7	T 1 20 1000- C 4 A
Esthonia	**************		********	June 1-30, 1923: Cases, 4. Aug. 1-31, 1923: Cases, 2.
Fipland				May 1-15, 1923: 1 case. July 2-31.
3 1111111111111111111111111111111111111				May 1-15, 1923: 1 case. July 2-31, 1923: 1 case. Aug. 1-31, 1923:
				2 cases.
Great Britain:				
Birmingham	June 18-30	3		w
Bristol	June 28	6	********	Present.
Cardiff	June 3-30 June 28	0		123 cases reported in hospital,
	July 12	19		present in rural districts. July
		10		present in rural districts. July 15, 1923: Present. Aug. 9, 1923:
Do				two weeks previously about 250 cases present in hospital.
	Sept. 9-15	5		two weeks previously about 250 cases present in hospital. Sept. 22, 1923: Additional cases in
Do	Sept. 9-15			two weeks previously about 250 cases present in hospital. Sept. 22, 1923: Additional cases in Middlesex County.
London	Sept. 9-15	5 1 6		two weeks previously about 250 cases present in hospital. Sept. 22, 1923: Additional cases in
London	Sept. 9-15	1		two weeks previously about 250 cases present in hospital. Sept. 22, 1923: Additional cases in Middlesex County.
London	Sept. 9-15. June 3-9 July 8-Sept. 8. Sept. 16-22.	1 6 1		two weeks previously about 250 cases present in hospital. Sept. 22, 1923: Additional cases in Middlesex County.
London	Sept. 9-15	1 6		two weeks previously about 250 cases present in hospital. Sept. 22, 1923: Additional cases in Middlesex County.
London	Sept. 9-15	1 6 1	19 2	two weeks previously about 250 cases present in hospital. Sept. 22, 1923: Additional cases in Middlesex County.

Reports Received from June 30 to October 19, 1923-Continued.

SMALLPOX-Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Guadeloupe (West Indies)				July 22-Aug. 4, 1923: Present in epidemic form. (Reported as alastrim.) Aug. 17, 1923:
Basse Terre	Aug. 17-Sept. 29		-	alastrim.) Aug. 17, 1923; Stated to be officially declared present. Sept. 14–29; Epi- demic generally diffused. Present.
Pointe à Pitre	Aug. 17			Estimated from 2,000 to 3,000 cases. Sept. 2–8, 1923: 1,500 cases present; 8 deaths reported.
Hungary				July 15-Aug. 4, 1923: Cases, 28.
India				Apr. 15-June 30, 1923; Cases.
Bombay	Apr. 22-June 30	298	141	8 112 deaths 2 933 Inly 1.
Do	July 1-Sept. 8	54	33	Aug. 4, 1923: Cases, 4,868
Calcutta	May 13-June 9 July 1-Aug. 25 May 13-June 30	12	9	Aug. 4, 1923: Cases, 4,868 deaths, 1,244; Aug. 5-Sept. 1, 1923: Cases, 8; deaths, 3.
Do	July 1-Aug. 23	17 24	13	1925: Cases, 8; deaths, 5.
Karachi	July 1-Sept. 8	13	4	
Madras	May 13-June 23	91	16	
Do	July 8-Sept. 1	37	14	
Rangoon	May 6-June 30	125	67	
Do	July 1-Sept. 1	41	18	Nov. 1 Dec 21 1000: Ganco 201
Indo-China			*******	Nov. 1-Dec. 31, 1922: Cases, 234; deaths, 68.
City— Saigon	May 20-June 30	34	. 23	Including 100 surrounding square kilometers.
Provinces—	July 1-28	31	18	Do.
Annam Do	Nov. 1-30 Jan. 1-31	3		
Cambodge	Nov. 1-Dec. 31	97	41	
Do	Jan. 1-31	32	6	
Cochin-China	Nov. 1-Dec. 31	125	34	
Do	Jan. 1-31	93	18	
Tonkin	Dec. 1-31	9	1	
raq (Mesopotamia): Bagdad	Jan. 1-31	32	11	
Italy:				
Leghorn	Sept. 17-23	6		
Turin	May 28-June 3 July 2-15	1 2		
Do	July 2-15	-		May 27-June 30, 1923: Cases, 226
Kingston Do	May 27-June 30 July 1-Sept. 22	39 43		May 27-June 30, 1923; Cases, 226, July 1-Sept. 22, 1923; Cases, 302. (Reported as alastrim.)
Japan: Kobe	May 28-June 10	2		
Do Java: East Java—	July 2-8	1	*********	
Soerabaya	Apr. 22-June 30	187	22	
Do	July 15-Aug. 18	61	8	
Soerakarta			********	July 31, 1923: Epidemic.
West Java— Batavia	May 5-June 8	17	3	Province.
Do	June 30-Aug. 10	1	i	Do.
Latvia				Apr. 1-May 31, 1923: Cases, 8.
Aguascalientes	July 8-14		1	
ChihuahuaGuadalajara	June 11-24 July 22-Sept. 22	7	10	June 1-30, 1923: Cases, 15; deaths,
Mexico City	May 19-June 30	164		Including municipalities in Federal district.
Do Palestine: Jaïla	July 1-Sept. 1 June 5-11	164		Do.
Persia:	June 3-11	1	********	
TabrizTeheran	Apr. 1-June 30 Feb. 22-June 14		2 30	District. Mar. 22-Apr. 1, 1923: Deaths, 7.
Poland	*************			District. Apr. 29-June 30, 1923: Cases, 1,861; deaths, 43. July 1-28, 1923: Cases, 14; deaths, 5.

Reports Received from June 30 to October 19, 1923-Continued.

SMALLPOX-Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Portugal:				
Lisbon	May 20-June 30 July 1-Sept. 22	35	3	1
Do	July 1-Sept. 22	42	10	
Oporto	June 10-30	6	3	
Portuguese West Africa:	July 9-Sept. 22	51	27	
Angola-	Ans. 1.01			
Loanda Rhodesia (British Africa):		1	2	
Northern Rhodesia Southern Rhodesia	May 8-14 May 3-16	21	8 2	-
Siam:	A 00 T 00	- 00		
Bangkok	Apr. 29-June 30	90	53	1 × 10 1000 G
Do	July 1-Aug. 11	105	50	Aug. 5-18, 1923; Cases, 77; deaths 42. Sept. 8, 1923; Reporte prevalent.
Sierra Leone: Freetown	July 16-31	1		Landed from S. S. Tsad, from
Kaballa	May 1-15	1		Southampton via Las Palmas
Pujehun	May 16-31			In Sembehun district.
Sambuya	Aug. 1-15			
Spain: Barcelona	May 31-June 6		1	
Do	June 28-Sept. 12.		5	
Seville	July 19-25		1	
Valencia	May 15-June 30	44	2	
Do	July 1-Sept. 22	67	7	
Basel	May 27-June 30	4		
Do	July 8-Aug. 25	8		
Berne	May 20-June 30			
Do	July 1-Sept. 8			
Luzerne	May 1-June 7 July 1-31	36 14		
Zurieh	May 20-June 23	10		
Do	July 15-Sept. 15	9		
Syria:				
Aleppo	July 15-31	6		
Damascas	May 15-June 11	7		
Punis:	Aug. 16-Sept. 4	4	1	
Bizerta	June 10-20	1		
Tunis	June 11-17	î		
Do	June 26-July 1	1		
Turkey:				
Constantinople	May 13-June 26		45	
Union of South Africa	June 27-Sept. 8			May 1-June 30, 1923; Cases, 66
mon or south Anta			********	deaths, 1 (colored).
Cape Province				May 1-31, 1923: Cases, 32 (colored).
Do	May 6-June 30			Outbreaks.
Do	July 1-Aug. 4.	*******	*********	Do.
East London	July 8-14.	1		
Natal	do			Do.
Do	July 1-29			Do. Do.
Transvaal				May 1-31, 1923: 1 case.
Do	July 1-Aug. 4			Outbreaks. July 1-7, 1923: Cases, 8; deaths, 1
Province-	July 1-7			, , , , , , , , , , , , , , , , , , , ,
Croatia-Slavonia			1	
Serbia	do.	2	1	
SerbiaBelgrade	June 10-16	1	î	
DoZagrebWoiwodina	July 8-14		î	
Zagreb	June 24-30	1		
	Index 1 7	1		

Reports Received from June 30 to October 19, 1923-Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
On vessels: S. S. Kargola	May 20-26	1		At Mombasa, British East Africa Vessel arrived from Bombay
S. S. Makura	May 26	2		Mar. 25, 1923. Two cases in quarantine (reported as alastrim). Vessel left Victoria, B. C. Apr. 28
8, S, Tsad	July 16-31	1		left Victoria, B. C., Apr. 28, 1923. Touched at Honolulu. At Freetown, Sierra Leone, Africa, from European and
s, s, —	Aug. 12-18	1		West African ports. Landed at Talcahuano, Chile.

TYPHUS FEVER.

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Algeria: Algiers	May 1-June 30		19	July 1-Aug. 31, 1923: Cases, 5; deaths. 6.
Argentina: Rosario	May 25-31		3	dutis, o.
Bolivia: La Paz	June 1-30	4		
Do Bulgaria:	July 1-31		1	
Sofia Do	Apr. 22-June 23 July 15-Sept. 1	11	1	Paratyphus, 2 cases; 2 deaths. Paratyphus, 5 cases.
Chile: Concepcion	May 22-June 18			
Iquique	Aug. 7-13 Sept. 2-8		1	
Taleahuano Valparaiso Do	May 13-19 May 7-June 23 July 1-Aug. 25	1	26 48	June 11, 1923: 34 cases in Salvador Hospital. July 30, 1923: 45 cases in hospital. Aug. 6: 58
				cases. Aug. 12-18: 82 cases stated to be present. Aug. 25, 88 cases in Lazaretto.
China:				oo take in manietto.
Antung	May 28-June 24			
Do Hankow	July 16-22 May 19-25			
Manchuria-				
Harbin Mukden	May 6-13 May 14-20			
Czechoslovakia				JanMar., 1923: Cases, 191; deaths, 6. Apr. 1-June 30; Cases, 132; deaths, 4. Para-
Bohemia	Apr. 1-June 30	8 2		Cases, 132; deaths, 4. Para- typhoid A, 1; paratyphoid B,
Russinia	do	98	1	20.
Silesia	do		1	
Slovakia	do	23	2	
Egypt: Alexandria		7	5	Provide haid forms & const
Do	Apr. 12-June 24	9	29	Paratyphoid fever, 2 cases.
Port Said	Aug. 3-19	i		
Esthonia				June 1-30, 1923: Recurrent typhus, 1 case; paratyphus, 2
Finland				cases. Aug. 1-15, 1923: Paratyphus, 16
France:				cases.
Marseille	Mar. 1-May 31		3	
Cobleng	May 27-June 2		1	
Do	July 29-Sept. 2	8		
Hamburg	May 20-26 July 29-Aug. 4			Case developed July 28, 1923, at
Do Königsberg	May 13-June 2			Emigration Hall, Hamburg.
Do	Aug. 12-18	1		
Stettin	May 27-June 9		1	

Reports Received from June 30 to October 19, 1923-Continued.

TYPHUS FEVER-Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Great Britain:		-		
Ireland— Cork	Aug. 19-25	1	1	
Greece	May 1-31	150	5	May 1-31, 1923: Cases, 876.
Athens	July 22–31		1	
Patras	Apr. 24-June 15	356	30	
Piræus Do	July 1-10	3		
Saloniki Do	Apr. 30-June 24 July 9-15	56 1	16	Apr. 30-May 27, 1923: Recurrent typhus: Cases, 3; deaths, 3.
Guatemala: Guatemala City	Apr. 1-June 30		5	Jan. 1-May 19, 1923: Cases, 318
HungaryBudapest	Jan. 1-June 2 Sept. 2-8	48 1	12	deaths, 36. In 11 counties.
Iraq (Mesopotamia): Bagdad	Apr. 1-June 30	3		
lapan: Nagasaki	July 2-8	1		
lava: Soerabaya	July 29-Aug. 18	16	3	1 1 T 00 1000 C 001
Latvia				Apr. 1-June 30, 1923: Cases, 231; paratyphus, 5 cases. June 1- July 31, 1923: Cases, 67; para- typhus, 1 case; recurrent typhus, 1 case.
Mexico:	June 1-30	1		
Guadalajara Do	July 1-Aug. 31	2	1	
Mexico City	May 20-June 30	75		Including municipalities in Federal District.
Do San Luis Potosi	July 1-Sept. 1 July 29-Aug. 4	98	1	Do.
Palestine				Aug. 14-20, 1923: One case; in
Jaffa	May 22-28 June 26-Aug. 6	5		northern district. Relapsing fever, 1 case.
Do	May 22-28	1		netapsing level, I case.
Tabriz. Teheran	Apr. 1-14 Feb. 22-June 14	2	4	
Do Poland	July 1-14		1	Mar. 4-Apr. 7, 1923; Cases, 2,253;
				Mar. 4-Apr. 7, 1923: Cases, 2,253; deaths, 172. Recurrent typhus Cases, 338; deaths, 6. Apr. 29- June 30, 1923: Cases, 2,203; deaths, 177. July 1–28, 1923; Cases, 447; deaths, 31. Recur- rent typhus: Apr. 29-June 23, 1923: Cases, 337; deaths, 3. July 1–28, 1923: Cases, 74; deaths, 3.
Portugal: Oporto Do	June 10-16 July 1-21	1 3		
Rumania: Kishineff	May 1-June 30	41		Jan. 1-Apr. 30, 1923: Cases,
Russia European Russia and au-	Jan. 1-Apr. 30	93, 999		103.854 (Corresponding period
tonomous republics. Siberia, Caucasus, and Cen- tral Asia.	do	9, 921		1922: Cases, 847,516.) Feb. 1- 28, 1923: Cases, 17,577. Recur- rent, Jan. 1-Feb. 28, 1923
Waterways and railways	do	2,934		Cases, 43,540.
Spain: Barcelona	June 21-27		1	
Do	Aug. 23-29		1	
Madrid	May 1-31 July 1-31		1 2	
Do				
Aleppo	May 20-June 16	4	2	July 8-14, 1923: Present.
Do	July 15-21 May 1-10	3		July 5-14, 1925. 1 1050116
Tunis:				
Tunis	May 28-June 24 July 9-15	3	2	

Reports Received from June 30 to October 19, 1923-Continued.

TYPHUS FEVER-Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
	May 13-June 26 June 27-Aug. 25	2	19 9	May 1-June 30, 1923: Cases, 230 deaths, 47 (colored). White- Cases, 15: deaths, 1. Total, 245 cases, 48 deaths.
Do	Apr. 29-June 30			May 1-31, 1923; Cases, 49 (colored); white, 5. Outbreaks. Do. May 1-31, 1923; One case (col-
Orange Free State	May 6-June 16			Outbreaks.
Transvaal. Johannesburg. Yugoslavin.	May 1-June 30	4	4	Do May 1-31, 1923: Cases, 7. July 1-7, 1923: Cases, 4.
Province-	July 1-7 May 27-June 2	4		
Serbia— Belgrade	Aug. 12-18			
	YELLOW	FEVE	R.	
Brazil: Bahin.			6 5	

Colombia:		11	6 5		
Bucaramanga	June 25-Aug. 26	******		Present.	